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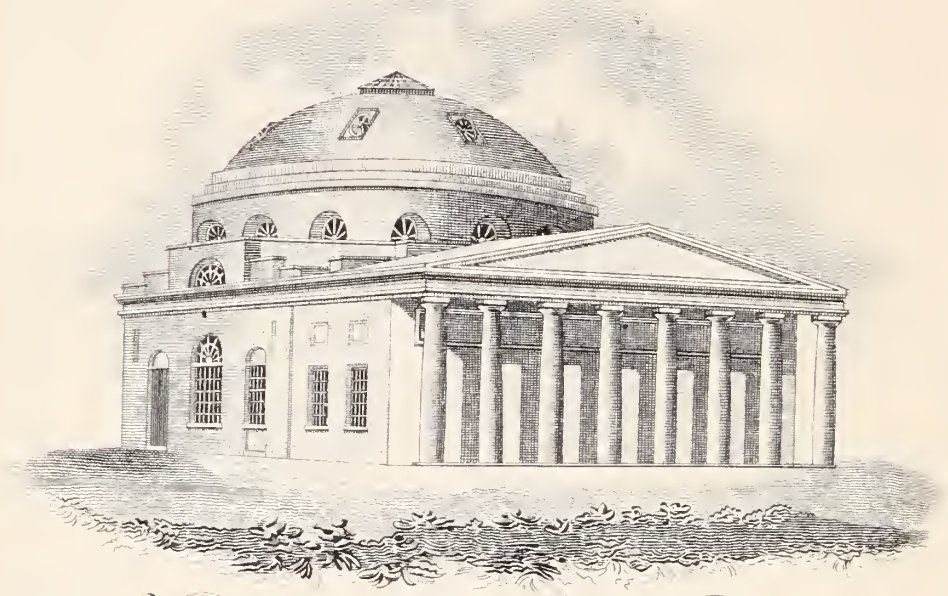

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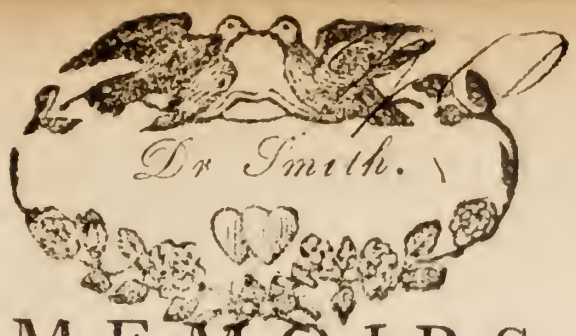

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MEMOIRS

OF

MEDICINE;

INCLUDING A SKETCH OF

MEDICAL HISTORY,

FROM

THE EARLIEST ACCOUNTS

TO

THE EIGHTEENTH CENTURY.

By RICHARD WALKER, Esq.

APOTHECARY TO THE PRINCE OF WALES.

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PREFACE.

THE hiſtory of general knowledge, in all ages and countries of the world, ſufficiently demonſtrates the gradual manner, in which acquiſitions the moſt important to human happineſs have been made.

But no branch of this knowledge affords greater evidence of ſlow progreſs, than the art of healing diſeaſes, which, though nearly coeval with the exiſtence of mankind, has ever reſiſted the beſt directed efforts of human wiſdom, ſtruggling with it toward the goal of perfection in vain.

As

As, however, the utility of a ſcience cannot be controverted merely on the ſcore of invincible defect, or partial uncertainty, neither reaſon nor common ſenſe will require arguments to prove, that, notwithſtanding this imperfection of medicine, the infirmities, to which human bodies are ſubject, demand all the remedies, that human ingenuity can ſupply.

To death, and the diſſolution of organiſed matter, no effectual barrier can be oppoſed. But if the painful ſymptoms or final event of this tendency can be alleviated or delayed, it is no preſumption, to reckon the ſtudy, which aims at ſuch purpoſes, amongſt the beſt and moſt uſeful employments of intellectual faculties.

That natural ſentiment and unbiaſſed opinion have ever accorded with this repreſentation, the univerſal records of ſuffering humanity

humanity will teſtify. For in the earlieſt ages, proficients in this art were reſpected as divinities, and the diadem of royalty gained much of it's luſtre from the laurel of primitive healing. And when it's practitioners, in ſucceeding times, corrupted by artificial modes of thinking, ſank far below the dignity of their occupation, it was ſtill regarded by the ſages of the world, as the moſt ſublime of human ſciences.

Nor have the vices or vanity of it's profeſſors in later days, aided by vulgar prejudice, and the ſophiſtical jealouſy of learning, eventually obſcured it's intrinſic excellence, or ſucceeded in reducing to any inferior ſtandard the character of a truly great phyſician, which, in addition to talents of the higheſt order, includes the moral qualities, that conſtitute the eſſence of ſocial virtue.

Deſcending

Deſcending from this conſideration of the native dignity of medicine to that of it's preſent condition in this country, it is to be lamented, that any of thoſe, intruſted with the important care of public health, ſhould be ignorant of the origin and progreſs of the art, in which they are engaged. If to practitioners of ſuch a deſcription be added all learners, wanting means of better information, with others leſs immediately concerned, whoſe laudable curioſity can be gratified, by tracing in the general outline of ſuch a ſcience many fluctuating operations of the human mind, there will be no inconſiderable number, to whom a ſlight and curſory review of the ſubject may be more acceptable, than a circumſtantial and learned detail.

To ſupply the want of an Engliſh compendium, calculated for their uſe, and adapted to modern taſte, the following ſum-

mary

mary of principal occurrences is offered, in hopes of being ſheltered by the humility of it's pretenſions from the ſeverity of critical cenſure. In alleviation of the great and obvious defects of ſuch a compoſition, muſt be pleaded the circumſtances of it's ſelection, for the original purpoſe of aſſiſting a treacherous memory, from the multifarious reſults of deſultory reading, amidſt the conſtant and preſſing avocations of a fatiguing employment.

The trifling notice taken of ſuperſtitious practice, or of fabulous and equivocal accounts, will need little apology at this day. But in excuſe for the omiſſion of authorities, ſo neceſſary to the confirmation of hiſtorical writing, it may be obſerved, that an abridgement of this kind ſcarcely admits any thing, which has not been allowed by common conſent. The advantages of brevity have therefore been conſulted in this reſpect, as well

well as in many inferior matters, relating to etymological accuracy, chronological order, and any general explanation of ſcientific or technical terms, which may be found in the medical vocabularies of our language.

MEMOIRS

MEMOIRS OF MEDICINE, &c.

BOOK I.

A REVIEW OF MEDICINE,

AS IT WAS PRACTISED BY THE MOST ANCIENT NATIONS,

AND ESPECIALLY AMONGST THE GREEKS.

BOOK I.

CHAP. I.

THE MOST ANCIENT ACCOUNTS OF MEDICINE, PRIOR TO THAT OF THE GREEKS.

IN the primitive days of the world, though ſome nations may have exiſted without phyſicians, none appear to have been without remedies: for notwithſtanding all the advantages of temperance, and exemption from hereditary diſeaſes, mankind muſt have ever been expoſed to injuries and pain from outward accidents, if not from internal cauſes. It is difficult, therefore, to conceive any period of time, when means of relief in ſuch caſes were not objects of inſtinctive reſearch.

From the firſt rude effects of this natural impulſe, the moſt ancient authors deduce

the origin of Medicine. The Babylonians, ſays Herodotus, the father of hiſtory, were accuſtomed to place their ſick in the ſtreets and highways, that paſſengers might ſee and inform them of any remedies, that had been ſucceſsful in ſimilar complaints. The ſame cuſtom has been aſcribed to other countries, though it is probable the healing art did not long continue in ſo rude a ſtate.

But prior to hiſtorical monuments, the moſt authentic chronology warrants the ſuppoſition of it's being firſt practiſed ſyſtematically in India, where human ſcience ſtill exhibits the moſt characteriſtic marks of remote antiquity.

A tranſition thence to China, brings us acquainted with the oldeſt medical records of the world, which aſcribe to the reputed founder of the Chineſe Monarchy ſeveral books on the virtues of plants, and prognoſtics of diſeaſes from the ſtate of the pulſe, at leaſt two thouſand years before any knowledge of the pulſe can be traced in the records of any other nation. Of ſuch writings, there may indeed be ground for diſputing about

about the real author, though their great antiquity cannot be doubted, if the high claims of this extraordinary people to priority of civilization be generally allowed. The preſent and almoſt excluſive attachment of the Chineſe phyſicians to this copious ſpring of medical information, may be noticed amongſt other ſigns of the ſtationary condition of their general knowledge.

It would be out of place to enter into the conjectures of the learned reſpecting the prime ſources, and particular channels, which ſupplied and conveyed the firſt ſtreams of ſcience from eaſt to weſt. Our medicine can be traced no farther back than into Egypt, and even there all it's remaining veſtiges are obſcured by fable, or clouded with all the abſurdities that veil the general face of Egyptian wiſdom. It retains indeed, even to this day, ſome ſtains of impurity from the admixture of Egyptian divination, magic, and aſtrology, which betray their origin no leſs clearly than the incantations and taliſmans of the firſt ages, or the phylacteries and alexipharmic nonſenſe of intermediate times.

As a principal branch of ſtudy and practice amongſt the prieſts of Egypt, it doubtleſs contributed, with their exclusive aſſumption of other parts of knowledge, and their uſurpation of all political power, to their high elevation above the vulgar.

Amongſt the crowd raiſed to eminence by ſuch means, Egyptian tradition has tranſmitted many names, celebrated for pre-eminence in the healing art. Leaving, however, the Antiquary to determine the claims and diſtinctions of Iſis, Oſiris, Apis, and Serapis, it will be ſufficient to mention Thoth, better known under his Greek appellation of Hermes, as one of the moſt important perſonages in the primitive catalogue of it's votaries. In addition to his great medical ſkill, this ſage was indeed gifted, by the ſuperſtition of many ages, with profound and unequalled judgment in all the depths of learning and knowledge: but the moſt prominent feature of his greatneſs is viſible in his ancient eſtabliſhment as the god and patron of the chymical art, though without any exiſting proof of his having been acquainted with qualities of bodies, diſcoverable

diſcoverable only by chymical means. Yet, whatever might be the real ſtate of his acquirements, it would be great injuſtice to diſgrace him as the ſource of all the myſterious jargon, which has deluged the world under the name of Hermetic Science.

To Hermes has been attributed a code of medical practice, from which it has been ſaid no phyſician in Egypt was allowed to deviate, without incurring the guilt and puniſhment of murder, if he failed of ſucceſs. Yet Hermes, by ſome Antiquaries, has been thought an allegorical perſon; whilſt others have confounded him with Noah, or his grandſon Canaan, with the Indian Bacchus, the Perſian Zoroaſter, and even the Jewiſh Prophet Moſes.

The uncertainty of Egyptian hiſtory, which has afforded the moſt fruitful field of learned conjecture, yields indeed no barren amuſement to the medical Antiquary, who, beſides the ſtories of Hermes, may trace the pedigree of Apollo himſelf from Horus, another renowned phyſician of ancient Egypt, or examine the grounds for ſuppoſing the

Eſculapius of Greece to be the ſame with the Eſculapius of this country, whoſe merits raiſed him to equal rank, as the God and Sovereign of medicine.

The credit which has been given to the anatomical ſkill of the Egyptians, on the ſcore of their mummies, and their modes of embalming, ſeems not much better founded than the preſumption of their architectural ſkill, drawn from thoſe maſſy remains of their power, the Pyramids. But the art of enveloping in bituminous matter a dead carcaſe, or a bony ſkeleton, to prevent the total ſeparation of their parts, as little reſembles any ſcientific examination of the human body, as the cuſtom of perpetuating the memory of ſome great perſon, or ſingular event, by a vaſt heap of ſtones, reſembles the taſte which gives ſymmetry and proportion to the edifices of Greece and Rome. Beſides, it would be difficult to reconcile any anatomical purſuits with the known religious prejudices of the Egyptians, which made them ſhudder at the defiling touch of death, and regard with a degree of

of ſacrilegious horror, even thoſe whom they employed in the office of embalming.

In the hiſtory of the Jews, little is found relating to the ancient ſtate of medicine, beyond the honourable eſtimation in which it was held by them, in conformity to the repeated injunctions of their divine law. The knowledge which enabled Moſes to pulverize that object of their idolatry, the Golden Calf, and qualified Solomon to allegorize the ravages of age over the human frame, have been adduced as preſumptive evidence of ſome progreſs in chymical and anatomical ſubjects. To inferences from ſuch evidence, any philoſophical inquirer will doubtleſs yield that degree of aſſent which they deſerve.

CHAP. II.

ON GRECIAN MEDICINE, BEFORE THE TIME OF HIPPOCRATES.

PASSING from the obſcurity of Egyptian annals, to the clearer records of Grecian ſcience, appears like a tranſition from night to day. This contraſt has been thought ſufficient to baffle thoſe ſpeculations, which have attempted to prove an intimate union between theſe two nations, and eſtabliſh a chronology, that repreſents Egyptian Sages as the immediate teachers of the philoſophers of Greece.

In a work of this kind, it is unneceſſary to ſpeak of the extraordinary and ſingular energy of character, with which theſe latter impreſſed their countrymen, and elevated them into models for ſucceeding ages. But our peculiar ſubject compels us to obſerve the comparative purity of that light, which illuſtrates their moſt ancient ſtories and fictions, relating to the primitive ſtate of their medicine.

Thus

Thus reaſon and reflection influenced the ſhepherd Melampus, that oldeſt phyſician of Grecian name, when he gave hellebore to the frantic daughters of King Prœtus, after obſerving it's effect on his bounding goats. The liberal remuneration of his ſkill by one of his royal patients in marriage, with a third of her father's kingdom for a dowry, may be mentioned both as an indication of the ſimple manners of ancient days, and a proof of the early and high eſtimation of the healing art. His preſcription of ſteel infuſed in wine for the impotence of Iphiclus, one of the Argonauts, is another deciſive evidence of progreſs in rational medicine.

Similar proofs may be collected from the chirurgical operations of the Centaur Chiron, whoſe dexterity in treating outward diſeaſes, both in men and horſes, probably gave riſe to the romantic fables of his hiſtory.

His uſe of natural remedies appears from various accounts of his practice, and eſpecially from the frequent mention of his ſkill in the medical virtues of plants and minerals,

ſuch

ſuch as the centaury, which he applied to his own wound, and verdigris, of which he taught the uſe to his pupil Achilles, the ſcrapings of whoſe brazen lance, according to Homer, were ſcattered with ſuch good effect on the ſores of Telephus.

If the dignity or utility of medicine needed ſuch confirmation, the catalogue of it's early votaries might here be enriched with many illuſtrious heroes, who crowded for inſtruction to the Centaur's cave, at the foot of Pelion. But leaving more equivocal names, that of Eſculapius demands particular attention.

This great father of our art is ſaid to have been engaged in the Argonautic expedition, the firſt recorded enterpriſe of the Grecian chiefs in union. But the vanity of attempting to aſcertain or elucidate his perſon and character, appears ſufficiently in the doubtful concluſions of learned inquirers, ſome of which have extended to the reality of his exiſtence. Curioſity muſt therefore be ſatisfied with conjecturing, that he was probably one of the firſt ſages, who dedicated himſelf

himſelf wholly to the ſtudy and practice of healing.

Preſumptive evidence of dexterity and good fortune in this occupation, appears in the conſent of all antiquity to regard Eſculapius as the patron and god of medicine, to whom the ſupreme power had delegated unlimited authority over the ſprings of life and death. To confirm the opinion of his extraordinary ſucceſs, we have likewiſe the fable of his bodily death, which repreſents Jupiter yielding him up to the jealouſy of Pluto, indignant at the ſkill which threatened the depopulation of his ghoſtly domains.

The admirers of antiquity will expect ſome mention of thoſe emblems, the ſerpent, cock, and knotted ſtick, which ever accompanied the repreſentations of Eſculapius, and which have been generally regarded as typical of the difficulties of his art, and the vigilance and cunning which it requires. That moſt important of them, the ſerpent, which might probably be intended to indicate his renovating power, was choſen to figure him out as the parent of immortality,

in

in the conſtellation Serpentarius, to which he was tranſlated by his father Apollo, whoſe ſanative power appears to have been one of the earlieſt objects of human faith upon record.

It would be ſuperfluous to dwell on the extenſive veneration of the Pagan world for this favourite deity. The magnificence of the temples erected by the Greeks to his honour, and eſpecially that of Epidaurus, has been noticed by a multitude of ancient hiſtorians. In theſe ſacred edifices began the uſeful cuſtom of ſuſpending tablets, on which were inſcribed the remedies which had been ſucceſsful in various diſorders, under the pretended direction of the Oracle, and the artful management of it's prieſts. Of theſe tablets we have ſome examples, which, though diſcovered in another place, and at a much later period, may be mentioned here, as not inapplicable to illuſtrate our ſubject.

In one piece of marble, thanks are returned to the god for a cure of pain in the ſide, by the application of hot embers from his altar, mixed with wine. In another, for

ſpitting

ſpitting of blood, cured by eating ſeeds or cones of pine roaſted in the ſacred fire, and taken with honey. A third records the ſucceſs of a collyrium made of honey and the blood of a white cock, in a diſeaſe of the eyes.

The truth of hiſtory obliges us to add, that the honour of no ancient deity was more ſullied by the conduct of his prieſts than that of Eſculapius. But this may eaſily be accounted for, by recollecting the extraordinary occaſions furniſhed by the infirmities of mankind, for the greateſt abuſe of public confidence. In the more enlightened days of Greece, theſe abuſes became notorious ſubjects of reproach, as appears from the ſcenic repreſentations of that ſatyric poet Ariſtophanes. The ſtory of Dionyſius, the Sicilian tyrant, cutting off the golden beard of his ſtatue at Epidaurus, as an unſeemly reproof to the ſmooth chin of his father Apollo, may be mentioned as another ſymptom of declining veneration for this moſt famous of medical oracles.

The introduction of allegorical perſonages to ſwell the trains of Pagan divinities, ſeems

to have been a cuſtom of very ancient date. Nor was it uncommon for theſe attendants of ſtate, by gradually engroſſing ſome delegated and inferior office, to get at length a conſiderable ſhare in the chief honours and power of their principal; ſuch at leaſt was the caſe with the fabled offspring of Eſculapius, Panacea, and Ægle, but more eſpecially their ſiſter the nymph Hygeia, the poetic goddeſs of health, who has long ſupplanted her father in the dignity and ſupremacy of his ſanative powers.

The deſcent from Eſculapius to his ſons Machaon and Podalirius, immortalized by Homer, ſeems like a ſtep from ſome aerial height to the firm tread of earth. After acknowledging the uncertainties of the father's ſtory, it would be uſeleſs to enquire whether theſe princes ought to be regarded as his natural or profeſſional children. We cannot, however, omit the opportunity of noticing the high rank which the practitioners of the healing art maintained in the moſt heroic ages of the world. For though the poet's regard to nature does not permit him to elevate their characters by ſupernatural attributes,

butes, he betrays no idea of their being degraded from the firſt order of princes by their daily care of the wounded ſoldiers. Nor can theſe evidences of manly and unbiaſſed ſentiment be invalidated by the different modes of thinking, which have prevailed in times further removed from the influence of ſimplicity and truth.

During the long period of ſeven centuries, from the Trojan to the Peloponneſian war, the annals of Greece afford no other memorials of medicine, than a caſual mention of the Aſclepiades, an hereditary tribe of phyſicians, ſo denominated as the traditional offspring of Eſculapius, in conformity to the cuſtom, which often transferred and perpetuated the name of an illuſtrious progenitor to his moſt remote deſcendants. Some individuals of this family, which probably monopolized the profeſſion, founded thoſe ſchools in the iſlands of Rhodes, Cnidos, and Cos, where the cuſtom of recording the ſucceſs of medical practice on durable monuments of braſs or ſtone laid the beſt poſſible foundation for permanent improvements.

Though crude theory was ill calculated to advance a practical ſcience, yet the philoſophy of the ancient Greeks had neceſſarily conſiderable influence on their medicine.

Pythagoras, who may be called the parent of this philoſophy, contributed but little to it's improvement by his reveries about generation, and the connexion between body and mind: nor was any great or practical advantage gained by his celebrated doctrine of climacterics, in which he applied his harmonic ſcale of numbers to analogous diviſions of man's age, portending extraordinary changes and revolutions in the human body.

But amongſt thoſe educated in the wholeſome precepts, and ſevere inſtitutes, of the Pythagorean School, eſtabliſhed at Crotona, (one of the earlieſt and moſt numerous colonies of Greece on the coaſt of Italy) the names of Alcmæon and Democedes claim particular mention in the annals of medicine. The former, who has been honoured as the inventor of moral apologues, was a

practitioner of great fame, and has been reputed the firſt who ventured to amputate a limb to ſave the life of his patient. The ſtory of Democedes, during his captivity at the Court of Perſia, curing both the elder Darius and his Queen Atoſſa, whom their Egyptian phyſicians had treated in vain, proves likewiſe the progreſs of our art amongſt the Grecians, long before the political conſequence of Athens and Lacedemon was acknowledged by the civilized world.

An extraordinary ſpecimen of the liberal rewards given to medical ſkill in thoſe early days occurs in the hiſtory of the ſame Democedes, who received from the Athenians an annual ſalary of one hundred minæ, another of a talent from the people of Ægina, and a third of two talents from Polycrates, the tyrant of Samos, amounting together to a thouſand pounds of Engliſh money, an immenſe ſum in thoſe days, when the pay of an Ambaſſador did not exceed two drachms a day, or about twenty-three pounds in a year.

The well-known diſſections of Democritus, the philoſopher of Abdera, furniſh the moſt ancient and authentic example of anatomical inveſtigation, undertaken with the expreſs view of diſcovering the ſtructure of the animal frame. With the ſalutary influence of this practice, the prudential ſcepticiſm of his contemporaries, Acron and Herodicus, not only combined to reſtrain that licentious theory, which an untempered ſpirit of philoſophiſing had already introduced into medicine; but alſo to recommend a moderation in practice, which an early and indiſcriminate uſe of violent remedies had made very neceſſary.

To what has been ſaid of medical ſubſtances, muſt be added, the ſuppoſition of opium being well known to the ancient Greeks. The Nepenthes, with which Helen treated the gueſts of her huſband Menelaus, was probably the true Thebaic extract, as appears both from it's immediate effects, and the accounts which Homer gives of her procuring it from Egypt, of which Thebes was then the principal city.

To

To aſſert their profound ignorance of chymiſtry, may be no compliment to the ſurviving admirers of occult ſcience, whoſe predeceſſors have been indefatigable in their endeavours, to find ſome memorial of it's exiſtence amongſt this enlightened people.

CHAP. III.

OF HIPPOCRATES.

THE appearance of Hippocrates, in the medical firmament, is that of a great luminary ſuddenly diſperſing the ſhades of obſcurity and doubt.

He was born in the iſland of Cos, at the beginning of the 80th Olympiad, 460 years before the commencement of the Chriſtian æra. His father Heraclides was reputed to be the ſeventeenth lineal deſcendant from Eſculapius, and his mother Phenerate the eighteenth from Hercules. The fame of ſuch anceſtry muſt have had the influence of hereditary attachment, and accounts for his early and entire dedication to the practice of the art, which he was deſtined to refine and improve. His firſt medical inſtructions, after thoſe of his father, he received from Herodicus before mentioned, and he was tutored in general ſcience and philoſophy by Gorgias, a celebrated ſophiſt, and an orator of renown.

The

The exercise of his profession, agreeably to the custom of the age, led him from place to place, so that he is reported to have visited every city of Greece, and to have travelled over the greatest part of Asia Minor in a medical capacity. His stay, however, must have been often considerably protracted, as appears from his long attendance on many tedious diseases, of which his works so accurately describe the progress.

At Larissa, the chief town of Thessaly, where he spent much time, and composed several books, Hippocrates ended his useful and honourable life at a very advanced age. Besides two sons, Thessalus and Draco, he left a daughter married to his favourite pupil Polybius, who arranged and published the works of his great master.

The general history of science affords sufficient evidence of the high estimation in which this primitive physician has been held in all ages, and almost in all countries of the world. In his life-time, the honours conferred upon him by public consent and sovereign munificence exceeded those, that

have diſtinguiſhed the merit of any other individual. Nor has there ever been a period, when even they, who diſputed his profeſſional authority, omitted their tribute of praiſe to the dignified ſimplicity and benevolence of his general character.

A ſteady and perſevering zeal for the honour and improvement of the profeſſion which he followed, is a ſtrong feature in the hiſtory of Hippocrates. Indeed the qualifications and duties it requires have never been more fully exemplified than in his conduct, nor more eloquently deſcribed than by his pen. Of this eloquence, his firſt nervous aphoriſm relating to the ſubject, preſents one of the moſt perfect and conciſe proofs within the compaſs of human language, where he expreſſes in few words, that "The brevity of human life is inſufficient "for the full conſideration and thorough "knowledge of a ſcience like medicine, "which admits even the evidences of long "and hazardous experience with diffidence "and caution, and adds to great inherent "difficulties, the neceſſity of attending to

"many

" many external duties and obſervances,
" relative to thoſe concerned in its ſuc-
" ceſs."

His cuſtom of admitting none to his inſtructions, without the ſolemn introduction of an oath, enforcing not only the utmoſt exertions for it's advancement, but a rigid attention to the morality of private life, ſtrongly evinces his perſuaſion of it's importance to ſociety at large. But the moſt eſtimable part of his profeſſional character conſtitutes a compleat model of artleſs ſimplicity, ſuperior to the ſpeculating faſhion of his age. For though poſſeſſed of all the learning, and ſkilled in the various philoſophy of Greece, he ſcorned the ſubtilities of that theory, which might withdraw attention from nature, whom he cloſely obſerved, and whoſe dictates he followed with the moſt ſcrupulous humility.

The works of Hippocrates are to be regarded both as regiſters of public experience and individual obſervation. But the aggregate of medical knowledge, tranſmitted from his predeceſſors, he had the ſkill to arrange

and

and intermix with his own matter in ſo conſiſtent and uniform a ſtyle, that no elementary work of the ſame date ever ſurpaſſed. The miſcellaneous ſubjects of a conjectural art could not indeed be diſpoſed with all the preciſion and elegance of Ariſtotle's poetics, or the ſublime morality of Plato. Nor would it be reaſonable, in the infancy of ſuch an art, to expect that attention to order and method in writing, which ſucceeding improvements have rendered ſo much more eaſy and obvious. Yet with all the defects that can poſſibly be found in this author, compared with the moſt enlightened of his followers, he muſt ever remain an unrivalled example of honeſt and uſeful induſtry, which ſhould rouſe the bluſh of ſhame in thoſe indolent cavillers, who cenſure his patient prolixity, and oppoſe their own conciſe and ephemeral ſyſtems to the extenſive and ample bounds of his practice.

The many books aſcribed to Hippocrates have been publiſhed, tranſlated, and commented upon, in almoſt every language of the univerſe. In ſo ancient and numerous a catalogue, it is not ſurpriſing, that diſputes have

have ariſen concerning their general authenticity. Suffice it to obſerve, that his Aphoriſms, Coan Prognoſtics, and Eſſays on Epidemic diſeaſes, contain the ſummary of the reſt, and bear the ſtrongeſt marks of originality. By connecting, therefore, their promiſcuous contents on phyſiological and pathological ſubjects with the general therapeutic rules which they contain, the moſt ſatisfactory view of his doctrines and practice may be obtained.

Such an abridged conſideration will indeed be far from exhibiting a juſt view of the practical excellence of the original, and may be thought to exceed the apparent and more amuſing ſcope of brief narration. But it will ſerve to preclude the future neceſſity of general reference to the particulars of ancient medicine, which continued for many ages nearly the preciſe and identical medicine of Hippocrates.

CHAP.

CHAP. IV.

OF THE ANATOMY, PHYSIOLOGY, AND PATHOLOGICAL SKILL OF HIPPOCRATES.

IN that conſcious power, capable of directing every thing neceſſary to the preſervation of life and health, which Hippocrates ſuppoſed to be always preſent in the animal frame, we have not only the vis medicatrix naturæ of all medical ſyſtems, but the prototype of that firſt principle of vital functions, diſtinguiſhed by ſucceeding theoriſts with variety of names. The mode likewiſe which he aſſigns to it, of operating by an inſtinctive attraction or repulſion, of ſimilar or diſſimilar parts, has been copied without any eſſential difference of terms in the ſpeculations of the moſt enlightened naturaliſts. But the evolution of his phyſiological opinions will appear by a curſory examination of his anatomical notions, for the imperfection of which, the ſcanty ſources of his information ſufficiently account.

As

As it is preſumed, that he never diſſected a human body for the purpoſes of anatomical inveſtigation, his knowledge of the internal organs could only be derived from accident, or a compariſon with thoſe of other animals. And here, prior to the conſideration of particulars, it muſt be premiſed, that the crudity and apparent abſurdities of theory, grounded on this new and uncertain foundation, cannot be conſidered as matter of reproach, or adequate cauſes of that contempt, with which ſome faſtidious critics have treated this venerable author. Such injuſtice, indeed, ought to have been obviated by the recollection of his induſtrious diſcriminations of diſeaſe, and careful attention to the moſt proper objects of practice, were not common candour ſufficient to excuſe deficiencies, inſeparable from the age and circumſtances, and conſequently foreign to the perſonal character of Hippocrates.

His anatomical language refers in general to Solids and Fluids, under the name of parts *containing*, and parts *contained*. In treating of the former, he repreſents the brain

brain as a receptacle for redundant moiſture, and a condenſer of hot and ſwelling vapours, which it diſcharges again in defluxions and catarrhs. Nor does he ever appear to have ſuſpected it's connexion with ſenſibility and feeling; deſcribing even the optic nerve immediately proceeding from it, as a mere canal, through which the aqueous humour is diſtilled into the eye. He is likewiſe far from conſidering the brain as the peculiar ſeat of the ſoul, or thinking faculty, which he places indiſcriminately in the heart, diaphragm, and other parts.

From ſimilar ſpongineſs of ſtructure he was induced to attribute the ſame office of abſorbing ſuperfluous fluid to the lungs, though he did not overlook their obvious uſe in conveying external air to moderate inward heat, and ſupply the blood with ſome new principle.

On the anatomy of the heart, Hippocrates beſtowed great attention. But he regarded it merely as the organ for mixing with the blood ſome aerial principle, drawn from the lungs by it's auricles, which he deſcribes as inflaters,

inflaters, or bellows, peculiarly calculated for that purpoſe. The great veſſels proceeding from it, he confounded with every thing reſembling cords, ſuch as nerves, tendons, and ligaments, aſcribing to them all one common origin from the ſpinal marrow. Hence appears the improbability of his knowing any thing relating to the blood's real courſe, notwithſtanding the ſtrained interpretations that have been made, rather with a view of depriving later ages of the honour of this diſcovery, than out of real admiration for antiquity. Whatever, indeed, was known to the ancients on this ſubject, ſeems to have conſiſted in ſome general and looſe idea of regurgitation, or a certain flux and reflux, barely ſufficient to communicate ſuch a concuſſion to the veſſels, as might hinder the ſtagnation or congealing of their contents.

From the ſize and appearance of the liver, it is no wonder, that it ſhould have been always regarded as the great organ of ſanguification, before the blood's circuitous motion was underſtood. The materials for compoſing this vital fluid were, in the opinion

of

of Hippocrates, and indeed of all antiquity, brought to this great viſcus by a general ſuction of the veſſels communicating with the alimentary canal. He likewiſe attributed to the liver, as well as to all the other abdominal viſcera, a faculty of generating heat, and thereby promoting the neceſſary diſſolution of food.

To the obvious uſes of the kidnies, Hippocrates added the ſuppoſition of the urinary ſecretion being aſſiſted by tranſudation into the bladder from the ſurrounding parts.

His phyſiology of generation indicates his imperfect knowledge of the organs concerned in that proceſs. He had an extraordinary notion of the ſemen being prepared in the brain, and conveyed by the ſpinal marrow to the veſſels provided for it's reception.

He believed, likewiſe, in the loco-motive faculty of the uterus, in which he thought a fermentation of the male and female ſemen ſufficient to cauſe an evolution of parts,

parts, agreeable to the preponderance of either.

The circumſtances of embryo life engaged ſo much of his attention, that he compoſed a particular treatiſe on the difference between children born in the ſeventh and eighth months of pregnancy. But his ſentiments on theſe ſubjects are to be received, both with allowance for his ignorance in minute anatomy, and the prejudices and credulity of the age in which he lived.

He had no accurate ideas of muſcles, or of muſcular motion, though he well knew the number, figure, and connexion of the bones.

Hippocrates divides the fluids, or parts contained, into the four humours of blood, phlegm, yellow and black bile. The firſt, conveying warmth and nouriſhment to the body, he reckons of a hot, moiſt, and ſweet nature. To the ſecond, which he calls cold, moiſt, white, and ſaltiſh, he aſ-

ſigns the office of lubricating ſuch parts as are to be moved. He aſcribes a ſtimulating and detergent quality to the dry, glutinous, fat, and bitter particles of the yellow bile; whilſt he regards the laſt as a kind of fermenting leaven, or baſis, from which all the former are produced.

As he makes health to conſiſt in a due temperament and proportion of theſe humours, ſo he looks for the ſource of complaints in their exceſs, defect, or depravation. But his ſyſtem includes a farther analogy, or connexion between the vices of theſe four humours, the four ſeaſons of the year, and the four ages of man. Thus he imagines, a redundancy of blood, producing hot complaints, to prevail chiefly amongſt young people, and in the ſpring of the year; bilious diſeaſes in ſummer and middle age; melancholy, or predominance of black bile, in autumn; and the coldneſs and benumbing effects of viſcid phlegm, both in the winter ſeaſon, and the winter of human life.

The

The pathology of Hippocrates was very ſyſtematic with reſpect to the cauſes of diſeaſe, which he divided into external and internal. The former included whatever could affect the body outwardly, as air, exerciſe, reſt, ſleep, and watching; and the latter, thoſe things capable of producing an inward influence, as meat, drink, ſecretions, retentions, and paſſions of the mind. In his obſervations on the air, winds, and ſeaſons, he inveſtigated the cauſes of many ſimilar and epidemic affections, the hiſtory of which conſtitutes a very conſiderable and curious portion of his works. Nor did he overlook endemic ones, proceeding from peculiarity of ſoil, ſituation, and climate.

From ſuch an author may be reaſonably expected the natural diviſion of diſtempers into acute and chronic. The former he confined to the term of fourteen days, and ſubdivided them into three ſtages, the beginning, increaſe, and termination, or criſis. The tranſition from the ſecond to the laſt of theſe ſtages was the period in which he expected ſome indication from nature, by what outlet the morbific matter was to be

expelled; and this intention he was particularly careful not to interrupt, by exciting any other or contrary motion. When the criſis proved partial and incomplete, he ſtill reckoned every change or new accident, attended with evacuations either from the ſkin or the inteſtines, critical in a degree, till the full concoction and expulſion of the humours was effected.

In fevers of the moſt acute kind, Hippocrates looked for a regular criſis on the fourth day; but in thoſe leſs acute, on the ſeventh, eleventh, or fourteenth; after which the remainder of the diſeaſe was ranked amongſt thoſe of the chronic kind. In this ſtate he waited for the twenty-firſt day, and afterwards counted every fourth remarkable, though not neceſſarily and abſolutely critical. But through his whole ſyſtem, the number ſeven, in all poſſible combinations and diviſions, extending even to months and years, was regarded as the moſt certainly and finally judicial of all periods. He made allowance, however, for occaſional exceptions to all theſe rules, and noticed the circumſtances of ſome acute diſeaſes terminating

nating without any regular or viſible criſis at all. He likewiſe acknowledged frequent irregularities, by a tranſlation of the offending matter from one part to another, which motion is ſtill denominated, in his language, a metaſtaſis.

The numerous exceptions furniſhed by experience to the uniform courſe of acute diſeaſes, have been thought inſurmountable objections to Hippocrates's theory of critical days. Nor can theſe, perhaps, be wholly obviated either on the ſuppoſition of phyſical changes, induced by difference of climate, habit, and time, or the general alteration occaſioned by the interference of art.

But whatever may be thought on this ſubject, it ſeems impoſſible to point out a better foundation of diagnoſtic ſkill, than the method obſerved by this great maſter of the art, whoſe critical knowledge of ſymptoms enabled him not only to diſtinguiſh one diſeaſe from another, but to foreſee almoſt all their poſſible changes and terminations. His care and condeſcenſion in noticing a multitude of ſigns, which are too generally over-

looked, and totally eſcape the eye of ſuperficial obſervers, was no leſs ſingular than conſtant and exact. In a thouſand little peculiarities of mind and body, poſition of the limbs, voluntary and involuntary motions, expreſſions of countenance, and the hourly variations of rapid diſeaſes, he could diſcern indications of great conſequence. But his moſt certain prognoſis was founded on the nature of the ſecretions, and of the urinary and alvine diſcharges, the appearances of which ſupplied him with ſuch rational grounds of judgment, as no ſucceeding examination has been able to impeach.

This account of his pathology cannot be concluded, without obſerving the uncertainty in which he has left poſterity reſpecting his knowledge of the pulſe, which many of his ſucceſſors have made an almoſt univerſal criterion of diſeaſe. The pulſations, which he frequently deſcribes, have been thought by ſome to allude merely to the general throbbings felt in acute or inflammatory complaints; whilſt others have conſtrued his expreſſions agreeably to a more preciſe and modern idea of the term. It does not, however,

however, appear, that he ever expected from it indications of the firſt conſequence. His authority, therefore, cannot be quoted for enhancing the importance of a ſymptom, which, conſidered abſtractedly, may lead to almoſt every ſpecies of practical miſtake.

To the induſtry of Hippocrates the ſcience is probably indebted for an account of all the diſeaſes, which came under his inſpection. Of the whole number, the greateſt part are ſtill characteriſed by the names invented or adopted by him, and not more than five or ſix of them appear to be extinguiſhed or unknown.

CHAP. V.

OF THE THERAPEUTICS, OR MEDICAL PRACTICE OF HIPPOCRATES.

FROM the general ſilence of Hippocrates, relating to the ſucceſs of his remedies, it may be conjectured, that he thought a thorough knowledge of a diſorder the moſt important ſtep towards it's cure. It may likewiſe indicate the ſcepticiſm of long experience, which admits with heſitation general concluſions from particular caſes: Yet he has not left us without documents ſufficient for examples of his manner of treating moſt of the complaints he deſcribed.

The therapeutic medicine of antiquity always commenced, and often wholly conſiſted in the regulation of diet. On this ſubject, Hippocrates's rules firſt reſpect the preſervation of health, and include many injunctions of moderation, with cautions againſt a regimen of ſuch exactneſs and uniformity as may render the body unable

nable to bear any neceſſary or unforeſeen change. They refer likewiſe to many ſtrong gymnaſtic exerciſes uſed by his countrymen, as means of obviating the beginnings of diſeaſe.

In curative axioms, the copious minuteneſs of Hippocrates deſcends to the very extreme of tautology. Practitioners, however, can ſcarcely be too frequently reminded in his words, "That as contraries cure contraries, ſo evacuation is the remedy for repletion, and repletion for the loſs ſuſtained by evacuation; that deficiencies are to be ſupplied, and ſuperfluities retrenched; that contraction and relaxation are to be treated with their oppoſites, and that fluids moving in improper courſes are to be brought back into their own channels;" in the practical application of which ſimple maxims, the moſt uſeful part of medicine doubtleſs conſiſts.

His reiterated obſervations on the powers of nature, and the wiſdom of truſting to her efforts in preference to the haſty, violent, or uncertain aſſiſtance of art, are of the

the ſame practical importance, however ſuperſeded by the officiouſneſs of ignorant conceit. Nor is his prudent caution leſs remarkable, when he aſſerts, that though deſperate diſorders require deſperate remedies, yet no experiment ought to be tried, where the proſpect of advantage does not exceed that of certain riſque.

In the regular and rigid application of dietetic rules, Hippocrates ſought the firſt means of ſuch addition, diminution, or oppoſition, as might aſſiſt nature in expelling or ſubduing the cauſe of diſeaſe.

In purſuing theſe ſubjects, the delicacy of modern feelings is appalled at the diſcipline of ancient practice, which in very acute diſeaſes interdicted every kind of nutriment for the firſt three or four days, allowing only as much thin, weak drink as was ſufficient to moiſten the parched throat, which was often adminiſtered on a ſmall ſponge, to prevent the thirſty patient from ſwallowing too copious a draught.

During

During this period, it was intended to leave the active powers of the conſtitution at full liberty to drive out or change all morbid matter. But if this effect did not follow, or if the ſtrength of the patient failed in the trial, a more plentiful dilution was then allowed, with a beverage compoſed of eight parts of water, one of honey, and one of vinegar, enriched occaſionally with the juice of acid fruits, cooling herbs, or ſome weak ſharp wine. This plan, when neceſſary, was generally continued till the fourteenth day, the reputed commencement of the chronic term, when a more ſubſtantial diet was allowed, though ſtill without recourſe to any medicine, except gentle emetics and laxatives, the former conſiſting generally of a decoction of hyſſop with ſalt and vinegar, and the latter of expreſſed juice or decoction of common cabbage, or the herb mercury, or the more pleaſant exhibition of whey, a little ſalted. For the ſame purpoſe, mild ſuppoſitories were in common uſe, and clyſters of ſea-water, or of vetches boiled in milk with a little ſalt.

When

When more powerful remedies became neceſſary, ancient medicine had the choice of ſome of the moſt active purgatives hitherto diſcovered in the vegetable world. Amongſt theſe, black and white hellebore, elaterium, colocynth and ſcammony held the firſt place, and frequently followed each other in quick ſucceſſion. But they were never adminiſtered without ſpecial regard to the ſtrength of the patient, and often to the ſeaſon of the year and particular ſtate of the weather; nor were they ever preſcribed to children, old people, or pregnant women.

A belief in the ſpecific virtue of ſome draſtic drugs, attracting and expelling humours peculiarly vitiated, has ever been one of the chief prejudices of medical practice. The long eſtabliſhed character of hellebore, for cleanſing the body from thoſe impurities, which have been ſuppoſed to occaſion various degrees of mental obſcurity and derangement, may be reckoned amongſt the moſt ſingular fallacies of this kind, which the experience of paſt ages has ſcarcely been able to deſtroy. Anticyra, however, the place

place once ſo famous for it's growth, is now only remembered in the pages of claſſical and poetical alluſion.

Returning to the practice of Hippocrates, beſides the powerful medicines employed by him to procure internal diſcharges, we have to notice his general methods of promoting other evacuations, which, though ſimple, were not leſs effectual. To cauſe perſpiration, he uſed every external means of increaſing heat, ſuch as warming the room, covering the patient, pouring hot water on the head and limbs, with a free internal uſe of heated liquors, and often of pure wine. To increaſe the ſecretion of urine, he gave garlic, cucumbers, melons, celery, fennel, and other ſtrong flavoured herbs, and even cantharides mixed with honey and wine.

But of all important remedies, his greateſt was bleeding, an operation, the invention and firſt uſe of which is concealed in the obſcurity of primitive times. In extreme caſes of pain or inflammation, it was his cuſtom to open at once the

veins of both arms, and let the blood flow till the patient fainted. He often likewiſe drew blood copiouſly from the legs and feet, to relieve complaints of the head and upper parts of the body, by large and deep inciſions made with a common ſcalpel, and covered with copper or other metallic veſſels exhauſted of their air by fire, reſembling both in contrivance and intention the cupping glaſſes of our own times.

In obſtinate chronic caſes, theſe local bleedings were commonly ſucceeded by the actual cautery, which produced ſuch large and long continued diſcharges from the heads, necks, breaſts, ſides, bellies and limbs of his patients, as could not fail of conſiderable effect. Nor did he even ſpare their bones, which he burnt, ſawed and perforated without ſcruple, in conformity to his famous maxim, "that in outward diſeaſes the knife muſt be followed by fire, the laſt and moſt certain of all remedies." But proofs even of greater ſeverity appear in his directions to uſe the trepan itſelf for violent head-achs, and to force irritating ſubſtances into the windpipe in complaints of the

lungs, with a view of procuring, by ſome great effort, the diſcharge of the offending matter.

In diſeaſes peculiar to women, his theory reſpecting the locomotive faculty of the uterus ſuggeſted moſt of his appropriate remedies, the ſuppoſed action of which the recollection of that theory will be ſufficient to explain.

Narcotics were the only ancient medicines, in the uſe of which he ſeems to have been particularly cautious. Indeed the little he has ſaid on the ſubject has made it a matter of doubt, whether he ever uſed opium, that moſt potent and uſeful of the whole claſs.

Beyond what is implied in the preceding account of his operations, the ſurgical practice of Hippocrates may be inferred from his rational directions for the treatment of fractures and diſlocations, and the frequent cautions he gives reſpecting the danger and difficulty attending wounds and bruiſes in nervous or tendinous parts.

A catalogue

A catalogue of his external remedies, conſiſting of lead, copper, vitriol, alum, and nitre, which conſtitute the moſt powerful of any yet diſcovered, except thoſe of chymical combination, ſufficiently indicate a conſiderable degree of paſt experience in manual medicine. Of this progreſs a ſingular proof is likewiſe afforded, by his repeated injunctions to his diſciples, to forbear the operation of lithotomy, which he thought of ſufficient importance, to require the peculiar dexterity of a hand accuſtomed to no other profeſſional exerciſe.

CHAP.

CHAP. VI.

OF ARISTOTLE.

THE age of Hippocrates is dignified in the literary annals of the world as the æra, when the boundaries of human ſcience were enlarged far beyond their former limits. Amongſt that conſtellation of ſages who contributed to this extenſion, the hiſtory and theory of animal life was neceſſarily a conſiderable object of curioſity and contemplation. It is therefore no wonder, to find the phyſiology of the human body, blended with the refined and abſtruſe doctrine of the academic philoſophy, and forming a principal object in the experimental diſquiſitions of the peripatetic ſect. It's myſteries were not, indeed, much elucidated by Plato's ſyſtem of ideas, or his doctrines of intelligence, and inviſible agency. But the more ſolid ſtudies of Ariſtotle had a direct tendency to it's improvement, and were particularly calcu-

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lated both to refine and augment the accumulated ſtores of ancient medicine.

This prince of philoſophers came into the world about the time when Hippocrates left it. By his father Nichomachus, phyſician to Philip of Macedon, he was deſtined to the profeſſion of his own art. But the prudent determination of that monarch, in chuſing him to be the tutor of young Alexander, fortunately enlarged his ſphere to an extent, in which the active powers of the moſt univerſal genius on record could be more fully exerted.

Ariſtotle's original deſtination ſeems to have directed his ardent zeal for the knowledge of nature, to the particular improvement of medicine. For this purpoſe, he was furniſhed with uncommon advantages, by the munificence of his royal pupil, who conferred on him at one time a hundred talents (equal to fifty thouſand pounds of Engliſh money) for the expence of diſſections only. But it is to be lamented, that theſe diſſections were confined, by the ſuperſtition of the times, to the bodies of animals,

and

and were conſequently inadequate to the full purpoſe of teaching the œconomy of the human frame.

Though the phyſiology of Ariſtotle was generally conſonant to that of Hippocrates, his attention to many important ſubjects was much more particular and minute. From repeated and careful examinations of the heart, he concluded it to be the grand ſenſorium, communicating, by the endleſs ramifications of it's veſſels, ſenſibility to every part of the body. To the primary trunk of theſe veſſels he gave the name of aorta, in which he attributed the commencement of the blood's motion to a principle in nature that abhors a vacuum; which notion ſerved as the future baſis of many ſimilar ſpeculations on philoſophical ſubjects.

His compariſon of the meſenteric glands and veſſels to the roots and fibres of vegetables, ſucking their nouriſhment from the earth, can ſcarcely be improved as an illuſtration of animal digeſtion. That he had ſtudied this ſubject, both attentively and to good purpoſe, appears ſtill more evident, in

the diviſion he made of the alimentary canal, and the names that he impoſed on it's different portions, which continue to characteriſe them agreeably to their particular ſituation, their various ſtructure, or the diverſity of offices which they ſerve.

It cannot be matter of wonder, that this curious examiner of nature ſhould have been particularly inquiſitive into the organs, by which animal life is propagated without end; though it muſt be regretted, that he waſted ſo much time and labour in ſpeculative contemplation on a proceſs incomprehenſible by human wiſdom. But to make this or any other of his miſtakes in the higher ſpeculations of ſcience matter of reproach, can proceed only from the pertneſs of that ſceptic indolence, which has no title to the diſtinctions due either to intenſity of thought, or induſtry of action.

And here the claims of gratitude will excuſe the extrinſic defence of Ariſtotle, if not of his errors. For to what ſage of antiquity has univerſal learning more extenſive obligations, than to one exhibiting that

that rare combination of intellectual qualities, which unites the extremes of ſlow mechanic ſkill, patiently ſubmitting to arrange every groſs ſpecies of organized matter, with the ſubtle diſcernment, that almoſt inſtinctively comprehends it's more refined and complex modifications?

CHAP. VII.

CONCLUDING MEMORIALS OF MEDICINE IN ANCIENT GREECE.

IN proceeding with our narrative, we meet with many circumſtances, that indicate the high eſtimation, in which the art of healing ever continued in ancient Greece.

Both Philip and his ſon, who were ambitious of being ranked amongſt the Greeks, ſhewed very peculiar regard to their phyſicians, as appeared in many inſtances, beſides thoſe of Ariſtotle and his father. But though the former prince never failed in due reſpect to the ſcience, he was not blind to the artifice or vanity of it's profeſſors, as is curiouſly evidenced in the ſtory of Menecrates, who took the ſurname of Jupiter, and travelled about the country with a train of followers habited like inferior deities. When this moſt eminent of medical coxcombs arrived at the Macedonian court, he was treated with the

moſt

moſt ſtudied and ironical reſpect by the monarch, who ordered him to be fed in ſtate, like an aerial deity, with the vapor of burning incenſe, whilſt himſelf and his courtiers feaſted at an inferior table on more ſubſtantial fare.

The hiſtory of Alexander affords a ſtriking example of confidence in his phyſician Philip, the Acarnanian, when he ſwallowed the potion prepared by him, at the moment he gave into his hands the intelligence of it's containing poiſon. But this generoſity was ſadly contraſted by his crucifixion of the phyſician Glaucias, for not preſerving the life of his favourite Hepheſtion.

As the general ſcience of Greece continued to be improved by the diſciples of the Stagyrite, we find them imitating their great maſter in attachment to medical ſtudies. The firſt place amongſt them is due to Theophraſtus, the preſerver and publiſher of Ariſtotle's works, who wrote expreſsly on medicine. Menon, another of the Peripatetic ſchool, compoſed a treatiſe, called the aſſembly of ancient Phyſicians, from

which many fragments of their hiſtories have been tranſcribed by other writers.

As a public teſtimony to the honour of Grecian medicine at this period, ſtands that ſevere ordinance of the Locrians, which inflicted a capital puniſhment for diſobedience to the orders of a phyſician. Of the ſame kind is the more moderate law of the Athenians, forbidding the practice of it to women and ſlaves, which was ſingularly ſuſpended in behalf of Agnodice, a female of rank, whoſe paſſion for the art induced her to attend anatomical diſſections, diſguiſed in man's attire.

Of the rank maintained by individuals of the profeſſion, we have inſtances in the reſpect paid to Theſſalus, the ſon of Hippocrates, who lived long in honour and credit at the court of Archelaus, the moſt eminent of Alexander's ſucceſſors in his paternal dominions, and in the power which the namesake and grandſon of that great father of medicine ever enjoyed in the ſervice of Roxana, the wife and widow of that conqueror.

Diocles,

Diocles, the Caryſtian, was honoured by the Athenians as a ſecond Hippocrates: nor was the fame of Dexippus much inferior, who compelled a king of Caria to make peace with his countrymen, before he would undertake the cure of the ſick princes his ſons.

Of equal reputation were Prodicus and Praxagoras, the moſt eminent of the early diſciples of Hippocrates, who contributed to extend the fame of their maſter over the civilized world. Their contemporary Cteſias, the Cnidian, was the favourite phyſician of ſeveral Perſian monarchs, and diſtinguiſhed himſelf by writing a hiſtory of that empire.

The poetical eſſay of Nicander, on the antidotal virtues of plants, has preſerved his name in a ſort of claſſical ſecurity from the ravages of time. Many others were eminent for ſuperior ſkill, or peculiarity of practice, whoſe names it would be tedious to recite. Some indeed are remembered for different and leſs laudable reaſons, ſuch as Nicias, the attendant of Pyrrhus, king of Epirus, into Italy, whoſe treachery to his employer, whom

whom he offered to poiſon for a reward, was ſo ſtrongly contraſted by the virtue of the Roman general, when he cautioned his enemy to withdraw his confidence from ſuch a phyſician.

In anticipating the decline of Grecian ſcience, which accompanied the decline of Grecian power and independence, it behoves us to acknowledge Greece as the country, where medicine not only received it's fundamental conſtitution, but much of the outward form and manners, which have characteriſed it in all ſucceeding times. Even it's beſt modern vocabularies, notwithſtanding all the changes and additions it has ſuffered, contain little more than Greek terms and ſpecifications, moſt of which were invented and applied in the beſt days of Greece.

CHAP. VIII.

OF THE DISCOVERIES MADE BY ERASISTRATUS AND HEROPHILUS, RELATIVE TO THE BRAIN AND NERVES.

AMONGST the changes introduced into the political and civil ſtate of the world, by the exploits of Alexander, ſome of the greateſt conſequence were produced by the munificent proviſion, which he made for the encouragement of learning in his favourite city of Alexandria. But of all eſtabliſhments for this purpoſe, none appear to have been more efficacious, than thoſe for teaching and improving the healing art. For in addition to the original and external advantages, which made Alexandria the reſort of learned men from every part of the civilized world, this art was here emancipated from the ſhackles of ſuperſtition, which had ſo long reſtrained it's advancement.

The

The Ptolemies, who ſucceeded to the African diviſion of Alexander's conqueſts, became the firſt patrons of rational anatomy, by granting permiſſion to diſſect human bodies after death. But their power was farther exerted, in ſurrendering living malefactors, as fit objects of anatomical examination.

Without diſcuſſing the policy or humanity of ſuch a practice, we cannot but obſerve it's ſpeedy good effects on the ſcience, it was intended to improve. For we ſcarcely read of the medical ſchool of Alexandria, before we are informed of the great and important diſcoveries of Eraſiſtratus and Herophilus, two of it's earlieſt and moſt eminent profeſſors.

It was probably the opportunity of viewing the actions of living parts, that gave theſe phyſicians the firſt ideas of a ſyſtem of ſenſibility and power, depending on the brain and nerves, the true uſes of which ſeem to have never been ſuſpected by any of their predeceſſors.

In

In the theories of Hippocrates and Ariſtotle, we have ſeen the heart conſidered as the general ſenſorium, and it's veſſels the organs for communicating it's influence over the whole body. But theſe more accurate obſervers placed the ſentient principle on it's real throne, from which it is not likely to be precipitated by any future diſcovery.

The preciſe and ſpecific degree of credit due to each individual of this great medical duumvirate cannot be aſcertained, as they have been indiſcriminately honoured on the occaſion. Beſides their minute and careful ſcrutiny into the brain and it's appendages, they are both celebrated for tracing the moſt extenſive ramifications of the ſanguiferous veſſels, and elucidating by their diſſections the nature of digeſtion, abſorption, and ſome of the moſt material ſecretions of the body.

To Herophilus is particularly attributed the diſcovery of ſeveral minute and delicate parts, ſuch as the arachnoid membrane of the brain, the retina and choroid tunic of the

the eye, the proſtate gland, and veſiculæ ſeminales. His doctrine of the pulſe was ſo refined, that he is ſaid to have calculated it's vibrations with a ſort of geometrical nicety, and with ſome relation to the harmonic proportions of muſical ſound.

Of his wit and judgment we have a pleaſing proof, in his treatment of Diodorus, a pedantic genius of thoſe days. This quibbling philoſopher, by a ridiculous abuſe of logic, which has ſo often been preſſed into the ſupport of paradox and falſhood, pretended to deny the reality of motion by the ſophiſtical argument, that no body can move, except in the place where it is, or in that where it is not, neither of which he allowed to be poſſible. When this ingenious ſage applied for the relief of his diſlocated arm, Herophilus ſatirically adviſed him to the comfortable application of his own theory, according to which the bone could not poſſibly be miſplaced.

Eraſiſtratus, who by his mother was deſcended from Ariſtotle, is well known for

for the wiſdom and penetration diſplayed by him at the court of Seleucus, the Syrian monarch, in diſcovering the love of prince Antiochus for the young and beauteous Stratonice, his intended mother-in-law.

CHAP. IX.

THE ORIGIN AND CONSEQUENCES OF THE DISPUTES BETWEEN THE DOGMATISTS AND EMPIRICS OF ANTIQUITY.

DISCOVERIES like thoſe of Herophilus and Eraſiſtratus, which contradicted every eſtabliſhed opinion on the important ſubject of animal ſenſation, could not fail both to leſſen reſpect for ancient authority, and encourage a taſte for new ſpeculations. Thus we find the ordinary faith of phyſicians ſpeedily changed into doubt, and veneration for names, converted into ſuſpicion and contempt; whilſt the human mind became inflamed with extravagant expectations from ſuch great and unexpected novelties in the knowledge of nature.

The diſappointment of theſe flattering ideas, ſerving to augment the general diſguſt occaſioned by the broken connexion of former ſyſtems, laid the foundation for a ſcepticiſm in medicine, the effects of which are viſible

viſible in all ſucceeding periods of it's hiſtory. Diſpleaſed with the innocent and unavoidable miſtakes of their theoretical maſters, ſome of the moſt eminent and honeſt practitioners too haſtily withdrew from them their whole confidence; and from an exalted ſenſe of the preference due to experience, aſſumed a ſuperiority over their dogmatiſing brethren, whom they ſcornfully denominated the ſlaves of authority. Theſe, on the other hand, eager to ſupport the credit of their predeceſſors, undertook their defence, on grounds the leaſt tenable, and ſcrupled even to acknowledge their obvious errors.

In this manner commenced thoſe diſputes between the medical dogmatiſts and empirics of antiquity, which in their progreſs, engaging the worſt paſſions of humanity, became diſgraceful to both parties, and have left a ſtain in the annals of medicine, which the moderation of ſucceeding times bluſhes to recollect.

But notwithſtanding the virulence of theſe conteſts, in appreciating their mutual faults,

there is no proof that the former were guilty of deſpiſing the uſes of experience, or the latter of diſregarding the dictates of reaſon and reflexion. Nor can thoſe miſchievous principles or practices be alleged againſt the original founders of empiriciſm, which their ſucceſſors have made the refuge of ignorance and craft.

To the induſtry of ancient empirics we are indebted for the introduction, or rather for the full knowledge of ſedative and narcotic remedies, on the liberal uſe of which probably depended the ſuperior reputation acquired by ſome of them over their more cautious antagoniſts. Of this ſuperiority, a ſingular inſtance occurs in the many exiſting teſtimonies to the fame of Heraclides of Tarentum, recorded as the moſt ſucceſsful phyſician in any age or country of the world.

The names of Serapion and Philinus have been preſerved as the two firſt and moſt eminent teachers of ancient empiriciſm. To the conduct of their diſciples, beſides the changes effected by their principles in the eſſence

eſſence of medicine, may be traced thoſe which ſoon began to appear in it's external form and condition.

No longer engaged in ſtudying ſyſtems, and averſe to ſpeculating, even on ſymptoms of diſeaſe, they exerted their whole faculties in inveſtigating the power of medicinal ſubſtances, which laid the foundation of their pre-eminence in pharmaceutical ſkill. When ſufficient exerciſe was found for this peculiar talent, the care of preſcribing diet, and performing manual operations, were left to others, who in like manner confined themſelves to their ſeveral departments.

The healing art, which had hitherto been uniformly ſtudied and practiſed in all it's parts by one man, thus became divided into various branches, ſo that the dietetic and pharmaceutic phyſician ſeldom acted in concert. Nor did the chirurgeons generally employ their hands or inſtruments, but in ſucceſſion to them, except in caſes of accidents. The apotheca, or repoſitory of ſimple and compound medicines, was for a long time in the houſe of the pharmaceutic phy-

ſician, whither they were brought ready for uſe by the ſeveral tribes of collectors and workmen, who at length uſed an accidental knowledge of their qualities, as a ſtep to uſurp the office and dignity of their maſters. The conſequences of this uſurpation, and the arrangements of preſent practice founded upon it, are not objects of preſent diſcuſſion, though they may deſerve greater conſideration in a public view, than the policy of paſt ages has yet allotted to them.

MEMOIRS

MEMOIRS OF MEDICINE, &c.

BOOK II.

THE STATE OF MEDICINE AMONGST THE ROMANS, BEFORE THE TIME OF GALEN.

BOOK II.

CHAP. I.

OF THE PRINCIPAL CAUSES WHICH RETARDED THE ESTABLISHMENT OF MEDICINE AT ROME.

THOUGH the progreſſive ſtate of general knowledge has uſually kept pace with the gradual refinements of civilized life, the advancement of particular ſciences has often depended on a variety of local and temporary cauſes.

In the equality ſubſiſting amongſt the ancient republics of Greece, dignity and emolument were the rewards of ſuperior acquirements in thoſe arts, that alleviate the common ſufferings, and ſmooth the ordinary aſperities of human life. Such arts, however, were very differently eſtimated amongſt the early Romans, on whoſe native

and unſubdued ruggedneſs was founded their extraordinary power and pre-eminence over other nations. Compelled by the natural hoſtility of their primary aſſociation to conſtant war abroad, and the ceaſeleſs ſtruggles of political rivality at home, their general habits of life neceſſarily precluded both luxury and indolence, thoſe fruitful ſources of modern diſeaſe. And here may be ſeen one conſiderable cauſe, why the art of healing gained ſo late an eſtabliſhment at Rome.

But it cannot be ſuppoſed, that they were ever wholly inattentive to the ſubject, or negligent of obvious and common methods of relieving pain, or promoting the healing of wounds and broken limbs. All the acquired courage of the ſterneſt patriotiſm, though fearleſs of death and danger, muſt occaſionally have yielded to the hopes of regaining loſt health and ſtrength; nor is it poſſible to imagine Mutius Scævola himſelf, obſtinately negligent of any attempts to aſſiſt the cure of his mutilated arm.

The vanity, which ſo long profeſſed the moſt open diſdain of foreign manners, was generally

generally eager to domeſticate the divinities of other countries, with a view of rendering Rome no leſs the reſervoir of celeſtial than of human power. On this ground, equally characteriſtic of pride and ignorance, the Romans ſent an early deputation of their Chiefs to Epidaurus, whence they tranſported in great pomp a ſacred ſerpent, the ſymbol of Eſculapius, for whoſe worſhip they had prepared a temple on a ſmall iſland in the middle of the Tiber. But excepting the prieſts whom they appointed to regulate the ceremonies of this worſhip, there is no mention in their hiſtory of any medical practitioners, before the 534th year after the building of Rome.

At this period, Arcagathus a Peloponneſian got permiſſion, with ſome difficulty, to open a ſhop in a public part of the city for diſpenſing ſome external remedies, as external diſeaſes were the only ones that were allowed to be publicly cured. In his ſucceſs, however, the ſturdy patriots of the times foreſaw the ſame danger to corporal courage, which threatened the mental firmneſs of the State from a growing taſte for general

general and polite learning. The ſurgeon was therefore ſoon baniſhed, in company with all the philoſophers of Greece, who had begun to teach their conquerors the ſciences of humanity.

The moſt ſtrenuous oppoſer of Grecian medicine was Cato the Cenſor, ſo famed for inflexible attachment to primitive manners, as the only ſecurities for preſerving the power and liberty of Rome.

On whatever grounds this peculiar antipathy may be defended, it will remain a queſtion, whether principles hoſtile to the power and liberty of other nations deſerve to be regarded as laudable motives of public action. Such a query, in this place, can indeed be introduced only in compliance with the claims of equal benevolence, which ſeem to demand all opportunities to be taken of more reaſonably appreciating thoſe qualities, and that conduct, which, ſeen through the dazzling medium of hiſtorical embelliſhment, have too long uſurped the admiration of mankind.

But

But it is in our direct province, to notice the barbarous inconſiſtency of the ancient Romans, in baniſhing the profeſſors of an art, who pretended to ſome rule of practice, whilſt they ſubmitted to the rudeſt and moſt ineffectual of it's proceſſes. Of this nature was the conduct of Cato himſelf, who joined to the utmoſt indignation againſt medicine as a cultivated ſcience, a reliance on the moſt ridiculous and impotent remedies. His extravagant eulogies on the ſanative powers of cabbage, in the treatiſe he compoſed on agricultural ſubjects, might indeed be accounted for in a way leſs diſgraceful to his underſtanding, than his zeal in perſuading his countrymen to rely on charms and magic ſongs, for the cure of broken bones, in preference to the treatment of any regular practitioner.

The buſy and warlike enthuſiaſm of the Romans, diminiſhing with the cauſes that gave it birth, at length rendered their favourite employments uſeleſs, and compelled them to ſeek amuſement from the ſuperior ſkill and dexterity of ſtrangers. For this purpoſe they condeſcended to ſtudy the arts

of

of rhetoric and oratory, as peculiarly fitted to promote the ſelfiſh and ambitious views, for which the beſt characters amongſt them were too often diſtinguiſhed. Other ſciences were left to the induſtry and ingenuity of thoſe whom they had enſlaved, and thought beneath their dignity. And here appears the chief cauſe, why their medical practitioners ſo long continued in a ſervile ſtate; and why the art itſelf, in ſpite of it's intrinſic importance, was claſſed, in the language of the courtly Virgil, amongſt the *artes mutæ*, or ſilent offices, which became degraded by their application to common uſe.

It would be eaſy to enlarge on the ill-founded pride, which prevented the Romans from feeling or acknowledging their inferiority in thoſe accompliſhments, that alone conſtitute the real ſuperiority of man. But it is matter of ſurpriſe, that amongſt the cargoes of ſtatues and paintings, and the variety of books, which their conquering generals ſent home from Greece, no thought was beſtowed on the works of Hippocrates, which even Pompey himſelf neglected, in his eagerneſs to diſcover the childiſh antidote of Mithridates.

Mithridates. Nor is it leſs ſingular, that, in the multifarious edicts of the ſenate, no notice occurs on the ſubject of public health, at the time when it's attention ſeems to have been particularly called to this conſideration, by the public bequeſt to the Roman people of the medical books of Attalus, the Pergamenian king, which he had valued above all his earthly treaſures.

CHAP.

CHAP. II.

OF THE MOST EMINENT PHYSICIANS AMONGST THE ROMANS BEFORE CELSUS.

THE late date of medical annals amongſt this eminent people is ſingularly contraſted by the celebrity of the firſt name which they record.

Aſclepiades, a native of Pruſa in Bithynia, who ſeems to have been an adept in the faſhionable philoſophy of Greece, and was certainly poſſeſſed of all the ſubtle ingenuity of his countrymen, ſettled as a practitioner of medicine at Rome, about the time of the Mithridatic war. From his name it has been ſuppoſed, that he was deſcended from the Eſculapian family. But it muſt be obſerved, that, from a patronymick title, Aſclepiades was become a mere optional appellative, not only for thoſe who pretended to diſtinction in the healing art, but alſo for adepts in other ſciences.

The

The eloquence and ſelf-ſufficiency of our phyſician appear to have qualified him for the pre-eminence he aſſumed over the vulgar herd of his brethren. To humour the inconſiſtent prejudices of the Romans, who objected equally to powerful remedies and ſlow cures, he took the motto of *tuto*, *jucundé*, *& celeriter*, and began his career by declaiming againſt the eſtabliſhed practice, which he ſatirically denominated a meditation on death. His claim to originality he likewiſe confirmed by diſowning all ancient theories, and promulgating one of his own creation in their ſtead. For this purpoſe he adopted the atomic philoſophy of Epicurus as the baſis of his ſyſtem, which repreſented all the phenomena of animal life, dependant on the motion of corpuſcular atoms through correſponding pores. On this foundation, his new fabric of pathology was recommended by a peculiar air of ſimplicity and conſiſtence, admitting only two cauſes of diſeaſe, in the mal-conformation of theſe animal corpuſcles, or of the paſſages through which they circulate.

Thus

Thus we ſee Aſclepiades the father of inventions, which in different forms and new dreſſes have continued to amuſe many of his ſpeculative followers down to the preſent day.

His great practical ſingularity was the neglect, or poſitive rejection of purgative medicines, in which he was generally imitated by the atomic phyſicians of antiquity. In other reſpects he was contented to follow the old regimen, except that he made a more liberal uſe of cold water in fevers than had been uſually done, and ſometimes attempted, by keeping his febrile patients without ſleep, and in conſtant motion, to cure one diſeaſe by exciting another. His whimſical notion of digeſtion's being a mere ſolution of the aliment at the place of it's final deſtination, deſerves leſs notice, than his more probable ſuppoſition of the urinary ſecretion in the kidnies being aſſiſted by a general abſorption from the inteſtinal canal.

The great character given to Aſclepiades, by his early diſciples, has been rendered ſomewhat

ſomewhat equivocal, not leſs by the reports of his quackery, than the unbecoming confidence, with which he declared, that he would never be ſick himſelf, though his good fortune aſſiſted in verifying this prediction, as he died at an advanced age, by a fall down ſtairs.

Amongſt the firſt phyſicians recorded in Roman annals, ſome names have the ſingular felicity of being preſerved in claſſic ſtory. Aſclapho is much praiſed, and the death of Alexion pathetically lamented in the letters of Cicero. The ſame celebrated pen has likewiſe tranſmitted the fame of Craterus, the phyſician of Atticus, immortalized for the reputed infallibility of his prognoſtics, by that proverbial alluſion of Horace, "Craterum dixiſſe putato."

From the manner in which Cicero has ſpoken of other phyſicians, ſome have concluded highly of the reſpect with which they were treated by the Romans at that learned period. But it muſt be recollected, that ſervility of condition precluded even the moſt eminent ſcholars and artiſts, from

any approach to equality with their maſters, amongſt whom the moſt refined and well-informed could only admit them to any degree of familiarity as a favour, or make them companions of their feſtive hours, merely for amuſement and relaxation. This ſpecies of condeſcenſion towards medical characters may be inſtanced in Philotas, who entertained the ſon of Mark Anthony, during ſupper, by a logical and ridiculous diſpute with a brother phyſician, for which he received the ſideboard of plate, as a reward for his ingenuity in proving, that if cold water be good in a fever, it muſt be ſo in all fevers.

The firſt public juſtice done to the practitioners of medicine at Rome was by a decree of Cæſar, which entitled them to the rights of citizenſhip. Antiſtius, who had the melancholy diſtinction of being called to examine the wounds of that uſurper after his aſſaſſination, was probably one of the firſt ſubjects of this elevation. Another was Artorius, remembered only as the phyſician of Octavius, and the companion of his cowardly flight from Philippi.

After the ſettlement of the empire in the Julian family, the Romans ſeemed eager to make amends for the long neglect, with which their anceſtors had treated this benevolent art. The famous Antonius Muſa obtained permiſſion of the ſenate to wear a gold ring, an excluſive privilege of the higheſt ranks, and had his ſtatue erected, during his life-time, in the temple of Eſculapius. It is not eaſy, however, to aſcertain the grounds of this favour, which have been attributed by ſome to his profeſſional merit, and by others to his taſte for learning and poetry, or rather to the partiality of Auguſtus, whom he had cured of ſome diſeaſe by a method of treatment, oppoſite to that which had been directed by his former phyſicians. Euphorbus, the brother of Muſa, and phyſician to young Juba, the Numidian prince, dedicated a treatiſe of natural hiſtory to Caius Cæſar, grandſon to Auguſtus.

The next medical name of importance is Philo of Tarſus, who invented an antidote, which was probably the original of that compoſition long known under the title of Philonium. And here the mention of antidote,

or ſpecific againſt malignant influence, leads to ſome account of that extraordinary dread of poiſon, which prevailed ſo much amongſt the ancients, and eſpecially the Romans, whoſe belief on this ſubject was bounded only by the extremes of credulity and ſuperſtition.

From theſe exceſſive apprehenſions, it has been ſuppoſed, that the ſecret arts of deſtruction had arrived at a degree of refinement and certainty, unknown to modern ingenuity. But there appears ſcarcely any other ground for this ſuppoſition, than the eagerneſs with which compoſitions were multiplied and augmented with every ingredient, that tradition or analogy repreſented as effectual in the ſmalleſt degree, againſt all the dangers of poiſonous influence. Of faith, likewiſe, in theſe compounds, both for their reſiſtance to morbid contagion, and as ſpecifics for every bodily diſeaſe, Roman hiſtory furniſhes many ſingular narratives, which reflect but little credit on the philoſophic principles of that people.

The

The advancing eſtimation of our art is viſible in the general proſperity of it's practitioners, during the ſhort calm, that ſucceeded thoſe ſtorms, which had ſo long ſhaken the peace of the world, and finally changed the fate of Rome. Perhaps, however, the Roman names of phyſicians at this period, on which much ſtreſs has been laid, were merely adopted by thoſe of low origin, conformably to the cuſtom of clients and dependants, calling themſelves after their patrons and maſters.

But whatever was the caſe in this reſpect, there is ſufficient proof of their being well paid, as we read of Aruntius, Calpetanus, Rubrius, and Albutius, who, for their attendance on the emperors Auguſtus and his two immediate ſucceſſors, had each an annual ſalary of two hundred and fifty thouſand ſeſterces, equal to two thouſand pounds of Engliſh money, an immenſe ſum for ſuch a ſervice at that time.

Stertinius, who had twice as much, with which he thought himſelf inadequately rewarded, acquired ſo great a fortune, that af-

ter expending prodigious ſums in embelliſhing his native city of Naples, he left to his heirs an inheritance, valued at thirty millions of ſeſterces. Alcon, celebrated by Martial for his dexterity in curing hernias by inciſion, was no leſs nobly remunerated by the public, who repaid him, in the courſe of a few years practice, ten millions of ſeſterces which he had loſt by a law-ſuit.

Roman medicine was indebted to Scribonius Largus, of a patrician family, for a work ſtill in exiſtence, on the variety of remedies and compoſitions, that had ever been uſed amongſt his countrymen. That the cuſtom of abbreviation in preſcriptions had grown into conſiderable practice, appears from a ſimilar and contemporary work of Menecrates, a Grecian, who boaſted of writing the names and quantities of all ingredients at full length.

Two other Grecians of this age are recorded for a ſpecies of dexterity, that reflects but little credit on the art. Charicles, the phyſician of Tiberius, to avoid the ſuſpicion of that jealous monſter, was accuſtomed to feel

feel his pulſe during the ceremony of kiſſing his hand, with a view of prognoſticating the tyrant's approaching diſſolution. Xenophon, the confidential favourite of the ſtupid Claudius, had the addreſs to gain an exemption from all public impoſts for the place of his nativity, for which extraordinary favour he repaid his employer, by ſeconding the criminal deſigns of Agrippina to poiſon him.

Not long after this period flouriſhed the celebrated Themiſon, generally reputed the firſt founder of the methodic ſect, though not more famous for the regularity of his theory, than the infelicity of his practice, if credit be given to that ſevere compariſon of the ſarcaſtic Juvenal, "Quot Themiſon ægros autumno occiderit uno." The contemporary name of Pamphilus is preſerved for his ſkill in curing the mentagra, a diſeaſe of the leprous kind, ſo called from it's primarily affecting the chin and lower part of the face, and ſaid to have been farther remarkable for confining it's ravages to the rich and idle, the probable effect of indulgence and exceſs.

To cauſes connected with luxury, may likewiſe be attributed the changes introduced at this period into the external ſtate of medicine. Phyſicians were now contented with the ſtudy and treatment of ſingle diſeaſes, and were attended on moſt occaſions by a number of ſubaltern aſſiſtants, who ſuperintended the exerciſes of the ſick, and were employed in the frictions, unctions, and fumigations, which conſtituted a principal part of medical practice. From this time alſo the tonſores, or barbers, may be ranked amongſt the appendages of the profeſſion, which privilege they ſtill poſſeſs in many countries of Europe, and have ſcarcely ſurrendered in our own.

CHAP.

CHAP. III.

OF CELSUS.

IT is ſingular, that the hiſtory of Aurelius Cornelius Celſus, the moſt claſſical of all ancient writers on medicine, ſhould be involved in ſo much obſcurity, as to occaſion doubts both of his perſon and condition, and the age in which he lived. The intrinſic evidence of his works proves him, however, to have been a conſummate adept in all the learning of a Roman phyſician, and affords ſtrong preſumption of their being compoſed in the moſt learned æra of his country.

The primitive ſtate of medicine has never been more perſpicuouſly delineated than in the preface with which they are introduced, nor has any author given a more regular and connected account of all the medical ſects of antiquity, or more juſtly appreciated their doctrines, and the arguments by which they were ſupported. Indeed the order and method of the whole, render the writings of Celſus

Celſus curious and valuable, in a degree far beyond thoſe of any contemporary authors.

By the diviſion of them into eight books, they were peculiarly adapted to the outline of ancient practice. The firſt four treat of ſuch internal diſeaſes as require only dietetic regimen; the fifth and ſixth deſcribe ſuch as are to be cured by medicine, and the two laſt whatever demands chirurgical aſſiſtance.

To one unacquainted with the extenſive duties of the ancient dietetic phyſician, many obſervations of Celſus on the various articles of food, and the modes of dreſſing it, will appear trifling and tautological. Some of them, doubtleſs, were dictated under the influence of vulgar and eſtabliſhed prejudice.

With the moſt rigid diſcipline of his predeceſſors, in acute complaints, he applied cold externally in a manner unknown to modern medicine. To forward the criſis of ſlow fevers, he made no ſcruple of uſing moſt liberal ablutions of cold water, joined with ſuch copious

pious and repeated bleedings, as ſeem to have ſet all common caution at defiance. Nor was he content with leſs powerful agents, when ſtimulating became neceſſary, generally preſcribing in intermiſſions of fever, large draughts of vinegar, with muſtard mixed in it, and often compoſitions of pepper, myrrh, and caſtor, or a ſtrong fœtid gum, called laſerpitium, probably the ſame with the aſafœtida of modern uſe.

Few ſyſtems of ſurgery have been more comprehenſive and methodical than that of Celſus. The diviſion which he makes of this branch of medicine, according to it's four principal indications, of adding what is defective, removing redundancies, uniting divided parts, and dividing thoſe which are improperly joined, is perhaps incapable of extenſion or improvement.

The firſt of theſe intentions ſeems to have been much oftener attempted by the ancients, than it is by the moderns, amongſt whom the reſtoration of loſt or mutilated parts is ſeldom an object of ſerious practice. Under the ſecond head, he lays down the moſt accurate rules

rules and directions, deſcribing the important operations of amputating, trepanning, lithotomy, and even couching, with all imaginable preciſion. In the third part, he ſcarcely omits any thing neceſſary to be known or practiſed, in the treatment of luxations and fractures. But he is ſtill more diſcriminative and exact on the fourth intention, eſpecially in what relates to hernias, which he claſſes according to the nature of their contents, applying to each thoſe diſtinguiſhing appellations, which characteriſe them in the preſent day.

CHAP.

CHAP. IV.

OF MISCELLANEOUS MATTERS FROM THE TIME OF CELSUS TO THE ESTABLISHMENT OF THE METHODISTIC SECT.

IF the works of Celſus be admitted as a criterion of medical ſcience amongſt the Romans, a more favourable judgment will be given, than the nature or aggregate of other memorials ſeems to warrant.

But almoſt every thing known of thoſe ſuppoſed to be his contemporaries, is either confined to their ingenuity in compiling and multiplying antidotes, or the more diſgraceful dexterity of raiſing their fortunes, on the ignorance and credulity of their patients. And indeed in all medical matters, much of what is called the age of the twelve Cæſars exhibits an extraordinary ſcene of jarring opinion, and trifling or inconſiſtent practice.

In

In this chaotic jumble, however, are to be ſeen ſome glimpſes of order and ſelection in the conduct of thoſe phyſicians who were denominated eclectics, or chooſers, in contradiſtinction to the epiſynthetics, who admitted the whole farrago of paſt ages as the ground of their practice.

At a time thus favourable for reformation, Theſſalus, a bold and daring adventurer, appeared on the medical ſtage. He was a native of Tralles, in Lydia, of low birth, and mean education, but ſingularly gifted for availing himſelf of that credit, which the world ſo readily grants to noiſy pretenſion, in preference to ſilent and modeſt merit.

Theſſalus, who ſeems to have well ſtudied his ground, began his career by loudly deſcanting on the imperfections of medical ſcience, and the inconſiſtencies of his contemporaries, thus paving the way for his own new ſyſtem of doctrine and practice. The materials for his theory he found in the coſmogony of Epicurus, which had indeed been employed by his predeceſſors Aſcle-

piades

piades and Themiſon, for a ſimilar purpoſe. This he extended to every variety both of diſeaſe and remedy, thereby attempting to render his ſcheme as compendious as poſſible, and to curtail every branch of the ſcience, ſo that the whole might be eaſily learnt in ſix months.

Such fallacious pretenſions to reduce into a ſmall compaſs the moſt multifarious and difficult of human ſciences, procured him that degree of popular applauſe, which inflamed his vanity and preſumption ſo much, that he aſſumed the title of Jatronikes, or conqueror of phyſicians, which he ordered to be engraven on his tomb. A more rational pride would have ſought reputation from the conqueſt of diſeaſes, rather than of doctors. The manner, in which the novelties of this ſchemer were applied and promulgated, will be ſeen more at large in a ſucceeding chapter.

Contemporary with Theſſalus was Andromachus, the phyſician of the emperor Nero, celebrated as the firſt who bore the honourable appellation of archiater, or phyſician

of

of the prince. This term, however, from it's equivocal etymology, may be conſtrued into a mere ſpecification of ſuperiority over other phyſicians.

But the name of Andromachus is leſs indebted to the dignity of his occupation, than to the permanent and unvarying reſpect paid by his countrymen, to that compoſition which he invented, and called theriaca, from the viper, one of it's principal ingredients. As evidences of this reſpect, may be mentioned the teſtimony, which the wife Antoninus long afterwards gave of it's efficacy in preſerving his own health, and the perſonal care, with which moſt of the ſucceeding emperors ſuperintended it's compoſition, which remains to this day an object of equal attention to the government of the Venetians, the only legitimate offspring of ancient Rome.

This, or another ſimilar antidote under the name of Galene, or the pacifier, Andromachus celebrated in a Greek poem, dedicated to his maſter Nero, which reminds us of a general cuſtom amongſt the Roman

phyſicians

phyſicians to make known in poetic ſtrains the virtues of ſimilar panaceas, which it was the chief buſineſs of their lives to invent.

The æra in queſtion affords the firſt memorials of aſtrological quackery combined with the art of healing. Chrinas and Charmias are recorded for thriving ſo much by this ſpecies of impoſture, that the former left by will one hundred thouſand pounds to embelliſh his native city of Marſeilles, and the latter felt ſufficient confidence to demand a ſum equal to one thouſand pounds for a ſingle preſcription.

The flouriſhing circumſtances of practitioners may be farther gueſſed at, by the pomp with which Symmachus viſited his patients, followed by a train of one hundred ſervants and pupils, and by the facility with which the phyſician Poſthumius Macrinus obtained from the emperor the freedom of the city for his friends and dependants.

But we have here to notice ſome more ſolid and laſting benefits accruing to medicine from foreign aid, than it ever gained

by the vanity or extravagance of it's profeſſors. Thoſe eminent and primitive naturaliſts Dioſcorides and Pliny, who were probably contemporary writers at this period, contributed both to increaſe the materia medica, and to diffuſe a taſte for inveſtigating more carefully the power of medicinal ſubſtances.

The opportunities, which the military marches of Dioſcorides, over moſt parts of the known world, afforded him of examining the vegetable and mineral kingdoms of nature, ſeem to have been diligently employed. In theſe reſearches, he is the firſt who deſcribes the chymical proceſs of extracting quickſilver from cinnabar by fire, in a veſſel called ambix, the parent word of that important inſtrument of the elaboratory, alembic.

To Pliny's extraordinary acquaintance with natural ſubſtances, may be added his critical acumen on medical ſubjects, apparent in his obſervations on the theory and practice of his own times. The exorbitant and heterogeneous compoſitions then in faſhion

faſhion furniſhed him with great ſcope for cenſure, and ſeem to have determined him to a preference of the empirical ſects.

The defects and miſtakes of ſuch an author will need but little apology to thoſe, who, fired by the example of his zeal and induſtry in the purſuit of knowledge, either aim at the good of others, or ſeek for honourable fame to themſelves. But the vanity, which boaſts of ſparing a few idle hours for ſtudy, muſt be humbled in contemplating a ſtateſman immerſed in the politics of a world, dedicating to it that time, which the moſt diligent uſually give to eaſe and refreſhment. For a long ſeries of years, in every interval of public buſineſs, during his repaſts, in his journeys, and whilſt his attendants were buried in ſleep, almoſt every hour added ſomething to thoſe rich and copious ſtores of information, for which poſterity is indebted to this benevolent philoſopher. Even his death, incurred by inſatiable thirſt after knowledge, remains the moſt venerable monument of philoſophic zeal on record, independent of the eloquent and pathetic deſcription given by the pen of his nephew,

that illuſtrious ſucceſſor to his virtues and fortune.

After the age of Pliny there is little guide for conjecture on the external ſtate of medicine in Rome, before the foundation of Hadrian's academy, in which profeſſors of this ſcience had a place. But this prince did not reap much fruit from his endeavours to improve it, if it be true, that he was compelled to ſhorten his own life on account of ſome ſevere and painful diſeaſe, which his phyſicians could not relieve.

In his reign Rufus the Epheſian is thought to have compoſed thoſe fragments of medical writing, that have ſurvived to our times. But the more illuſtrious name of Aretæus Cappadox calls us to a ſubject of greater novelty.

From various ſcattered accounts in hiſtory we are informed of the pneumatic ſect of phyſicians, in great vogue about this period of time, who were probably thus denominated

minated from their phyſiological adoption of that ætherial principle, which many ſpeculative philoſophers of antiquity had regarded as the primum mobile of organiſed bodies. Athenæus, a practitioner in the time of Pliny, has been called the father of theſe medical pneumatiſts, though there are no veſtiges of their connected principles prior to thoſe contained in the works of Aretæus.

The claſſical purity and elegance of this ſingular writer has occaſioned a ſuſpicion, that he muſt have lived long before the time in queſtion, when literary judgment had greatly declined from it's zenith of perfection in the Auguſtan age. If from internal evidence, his works be thought of much later date, there is reaſon for conſidering him as an inſtance of genius very ſuperior to the examples of negligence and bad taſte in contemporary writers.

The diſtinctive character of the pneumatic ſect conſiſted, as before mentioned, in the belief of a ſpirituous and ſubtile vapour circulating in the human body, which being

compreſſed or dilated in it's various cavities, became the cauſe of ſuch diſeaſes, as could not be claſſed amongſt thoſe affecting the ſolids or groſſer fluids, and which a modern vocabulary would probably denominate nervous or ſpaſmodic. By the different reſiſtance which this elaſtic vapour met with in different parts and ſtates of the body, a variety of effects were ſuppoſed to be produced.

Aretæus, in imagining it the ſource of heat, coldneſs, dryneſs, and moiſture, makes it the cauſe of many diſeaſes, as may be inſtanced in his notion of it's being condenſed, in the caſes of dropſy, and fluor albus.

But his practice, founded on that of paſt ages, was more experimental and rational than his theory. To him we are indebted for reſtoring the uſe of cantharides, which had long been rejected from the materia medica of antiquity, not only as an uſeleſs but a dangerous medicine, either for external or internal purpoſes.

CHAP.

CHAP. V.

OF THE SECT OF THE METHODISTS.

SORANUS of Alexandria, who practiſed medicine in Rome during the reigns of Trajan and Hadrian, put the finiſhing hand to the ſyſtem begun and carried on by Aſclepiades, Themiſon, and Theſſalus. It was probably in his time, that the ſupporters of this ſyſtem became univerſally diſtinguiſhed by the name of Methodiſts, on account of the regular and uniform modes of their practice, which however conſiſted chiefly in a more rigid application of ancient regimen, than that in common uſe.

To obtain a more compleat view of the ſubject, we muſt again obſerve the facility, with which the ſimple philoſophy of Epicurus was convertible into medical phyſiology. Admitting the animation of nature to depend on a circulation of atoms through ſpaces, a certain proportion between the two muſt neceſſarily ſubſiſt. The life of

organiſed bodies being ſuppoſed to conſiſt in a multiplication of theſe circulations, forming the chain and boundary of each other, the impediments to their free motion were regarded as the ſole cauſes of diſeaſe. The pathology grounded on ſuch a baſis, referred therefore to the two ſimple cauſes of ſtricture or laxity, conſequent on theſe impediments, without any diſcrimination of local or univerſal affection. By ſtating the practical application of theſe notions to parcular caſes, the outline of medical methodiſm will be more clearly delineated.

Every diſeaſe exhibiting obvious marks of retention, or appearances of hardneſs, tumefaction, and outward inflammation, the Methodiſt phyſician attributed to ſtricture, and the contrary circumſtances of increaſed diſcharge, ſoftneſs, and diminution, to laxity. And as the ſame remedies were indicated, whether the fault was in atoms or pores, he never ſought after primary or occult cauſes, depending wholly on the general character of the diſeaſe. But whenever the ſymptoms were equivocal, or combined by any alternate preponderance of cauſes,

cauſes, he was diligent to aſcertain the criterions, which diſtinguiſh one diſeaſe from another, thus availing himſelf of the diagnoſtic rules of dogmatiſm, which in words he pretended to deſpiſe.

Nor did his therapeutics differ eſſentially from thoſe of ancient eſtabliſhment, except in the rejection of purgative remedies in common caſes, which indeed may be conſidered as the moſt conſpicuous badge of his ſect.

The preciſion and formality of their regimen, aſſiſted by the loudneſs of their declamations againſt former ſyſtems, ſeem to have been the chief cauſes, which elevated theſe ſectaries far beyond their real importance.

It would be uſeleſs to dwell longer on their hiſtory, were it not for the amuſing climax, which the gradation of their proceedings forms in the hiſtory of medicine. Every cure was commenced by a rigid enforcement of the diatrition, or three days entire

organiſed bodies being ſuppoſed to conſiſt in a multiplication of theſe circulations, forming the chain and boundary of each other, the impediments to their free motion were regarded as the ſole cauſes of diſeaſe. The pathology grounded on ſuch a baſis, referred therefore to the two ſimple cauſes of ſtricture or laxity, conſequent on theſe impediments, without any diſcrimination of local or univerſal affection. By ſtating the practical application of theſe notions to parcular caſes, the outline of medical methodiſm will be more clearly delineated.

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cauſes,

cauſes, he was diligent to aſcertain the criterions, which diſtinguiſh one diſeaſe from another, thus availing himſelf of the diagnoſtic rules of dogmatiſm, which in words he pretended to deſpiſe.

Nor did his therapeutics differ eſſentially from thoſe of ancient eſtabliſhment, except in the rejection of purgative remedies in common caſes, which indeed may be conſidered as the moſt conſpicuous badge of his ſect.

The preciſion and formality of their regimen, aſſiſted by the loudneſs of their declamations againſt former ſyſtems, ſeem to have been the chief cauſes, which elevated theſe ſectaries far beyond their real importance.

It would be uſeleſs to dwell longer on their hiſtory, were it not for the amuſing climax, which the gradation of their proceedings forms in the hiſtory of medicine. Every cure was commenced by a rigid enforcement of the diatrition, or three days entire

entire abſtinence, which was reſumed in obſtinate caſes, a ſecond and a third time, after intervals barely ſufficient to allow of as much nouriſhment, as might keep the patient from dying of hunger and thirſt. The adaptation of this nouriſhment to the nature of every complaint, was likewiſe ſtudied with ſcrupulous exactneſs.

A warm decoction of farinaceous ſeeds, called alica, was the common drink in diſorders from ſtricture, to which were outwardly joined copious warm ablutions, fomentations, and cataplaſms, with frictions of oil, ſcarifications, cuppings, and bleeding with leeches, in various parts of the body and limbs. The ſame routine was followed in complaints from laxity, with cold drinks, and cold and corrugating applications inſtead of warm ones.

When medicinal ſubſtances and compoſitions were uſed, a preference was generally given to the moſt violent and powerful, for which the body was generally prepared by a copious bleeding.

After

After a failure of theſe common and ordinary methods, a long and ſevere courſe of diſcipline was inſtituted, with a view of changing and entirely renewing the whole ſtructure of the body. This renovation, dignified with the name of metaſyncriſis, was attempted by a round of operations, which had the name of cycle, compriſing every ſort of regimen and action capable of producing any alteration, and often tranſcending both the ſtrength and courage of the ſufferers,

To the ſevereſt abſtinence, was added a prohibition to move or ſpeak for a certain time, till by inward and outward applications of every ſtimulating and acrid ingredient, all viſcid and offending matter might be diſſolved, and rendered capable of being drained out of the body. Theſe applications became gradually more ſevere, till the patients could endure to have their ſkin bliſtered and burnt almoſt from head to foot, and to have their entrails tormented, by the moſt acrimonious ſubſtances, adminiſtered in every poſſible way. To bring about

about the compleat diſcharge of old materials, the noſtrils were ſtimulated by the moſt pungent ſternutatories, the ears ſerenaded by the moſt violent noiſes, the voice exerted in perpetual ſhouting, and the limbs in conſtant exerciſe, to which were added the moſt profuſe bleedings, ſweatings, and evacuations of every deſcription, compatible with the immediate ſafety of the patient. If this became doubtful, every indiſpenſible delay, or neceſſary refreſhment, occaſioned a renewal of the whole proceſs, which was then called cyclus reſumptivus.

During theſe proceedings, frequent changes were made in diet, and the drimyphagia, a courſe of dry and ſalted meats, often ſucceeded the more ſimple and ſucculent nouriſhment uſed at the beginning. As a general concluſion of the ceremony, came the cataclyſmus, or fluicing and ducking the renovated body in medicated waters. If this were ſuperſeded by a general failure of the whole plan, the patient was recommended to change of air, long journeys by ſea and land, and to the exerciſe of patience and reſignation, ſo

that

that the Methodiſt phyſician, like his ſucceſſors, was ſometimes compelled to acknowledge the futility of his art.

For this epitome of methodiſtic medicine, we are indebted to Cœlius Aurelianus, the tranſlator and commentator of the original work of Soranus, which has periſhed in the wreck of time. Of the age in which this author lived, there is no certain evidence, though himſelf informs us, that he was an African, and a native of Sicca, in Numidia. From the barbarity of his language, it may be concluded that he was a provincial phyſician, and never reſided long in Rome. It is likewiſe probable, that he was one of the laſt writers of the ſect to which he belonged, as it was ſoon afterwards overwhelmed by the ſuperior luſtre of Galen's ſyſtem.

Many curious matters occur in the quotations and criticiſms of Cœlius Aurelianus, both relating to phyſicians and diſeaſes, amongſt which latter may be reckoned his deſcription of the malthacus, or effeminacy of

of the fine gentlemen of antiquity, which was thought by the ſobriety of thoſe times a ſerious and proper object of medical diſcipline.

MEMOIRS OF MEDICINE, &c.

BOOK III.

THE SYSTEM OF GALEN,

AND THE

GENERAL STATE OF MEDICINE IN THE LOWER EMPIRE,

AMONGST THE ARABIANS,

AND

IN THE DARK AGES BEFORE THE RESTORATION OF LEARNING IN EUROPE.

BOOK III.

CHAP. I.

THE LIFE AND CHARACTER OF GALEN.

CLAUDIUS Galenus Pergamenus, denominated the ſecond father and founder of medicine, was born in the 131ſt year of the Chriſtian æra. His prænomen was probably adopted in compliment to ſome Roman family of diſtinction, but his ſurname was derived from Pergamus, in Aſia Minor, the place of his birth.

His father Nicon, a celebrated architect no inferior character at that time, was ambitious of initiating him early into all the learning of the age, for which purpoſe he ſent him to the beſt ſchools of the empire. At that of Alexandria, the moſt celebrated of theſe ſeminaries, Galen ſoon gave preg-

nant proofs of judgment, by ſelecting the rudiments of his philoſophy from the moſt approved doctrine of the Stoics, Academics, and Peripatetics, in oppoſition to the impious and faſhionable ſyſtem of Epicurus. In this place, likewiſe, began his attachment to that ſcience, which he was deſtined to govern for many centuries with oracular authority and uncontrolled ſway.

At the age of thirty-two years he went to Rome, where he found the medical practitioners of the old ſchools, ſubjugated to the power and credit of the methodic ſect. Into the intereſts of the former he entered at once with great zeal, but wanting temper and experience neceſſary to a ſucceſsful conteſt with a numerous and popular party, he returned home, under pretence of avoiding the plague, which then reigned in the metropolis of the world.

That he had made himſelf known to advantage, appears from his being ſoon afterwards commanded to attend the emperors Marcus Aurelius and Lucius Verus at Aquileia, in the vicinity of his native country.

This

This fortunate opportunity was ſo well employed, that the good Aurelius committed to him the entire care of his two ſick ſons, during his famous expedition into Germany, and at his return ordered him to Rome, to conſult with the Imperial phyſicians reſpecting a complaint of his own. On this occaſion a ſucceſsful opinion, contrary to that of his colleagues, raiſed him to an eminence, from which he was able to defy the power, and finally to ruin the credit of his former opponents.

As the greateſt part of Galen's life was ſpent in a zealous purſuit of knowledge, there can be no reaſon for queſtioning the excellence of his general character. Of this a ſtriking proof occurs, in the public reſpect which he enjoyed to the end of his days, amidſt thoſe violent political tumults, that afforded very ſlender ſecurity to the merit of any other individual. But more intrinſic evidence to this purpoſe is to be found in the ordinary tenor and ſpirit of his works, beſpeaking a mind under the beſt influence.

The juſtice and piety of his reflections on the Omnipotent Creator are ſtrongly exemplified in his moſt celebrated treatiſe De Uſu Partium, where he ſays, "In writing this book, I compoſe a hymn of praiſe to the Maker of the human frame, and am perſuaded that a grateful acknowledgment of his wiſdom, power and goodneſs herein, is more agreeable to him than the ſacrifice of hecatombs, or the moſt coſtly incenſe."

In a mind ſufficiently capacious to embrace the whole circle of human knowledge, it is no wonder to find a ſtudy, which has been the object of early choice and long contemplation, purſued with extraordinary ardour and intenſeneſs through all it's immediate and remote connexions. Thus we find every ſubject, poſſeſſing the moſt diſtant real or imaginary reference to medical concerns, ſtrongly engaging the attention of Galen. As fruits of his reſearches, we are told, that he compoſed five hundred different eſſays on the various parts of medicine, and half as many on other ſcientific ſubjects connected with it.

From

From this account, a pretty certain eſtimate may be formed of unequalled induſtry, which claims the gratitude of his ſucceſſors, not only for real improvement, but even on the ſcore of miſtake. For if truth muſt neceſſarily be ſought in the mazes of error, every earneſt inquirer has undoubted obligations to thoſe predeceſſors in the ſearch, whoſe miſtaken wanderings indicate the paths already tried in vain.

But the licentious and unbounded ſpeculation, which ſo much deforms the writings of Galen, admits of great apology, both from the conſtitution of his own mind, and the circumſtances in which he was placed with regard to his antagoniſts, who conſtantly provoked him to the exertion of his dexterity, in accounting for every thing in his own manner. The corrupt example of contemporary authors may be likewiſe adduced in excuſe for the ſame defect, as well as for that vanity and boldneſs of ſelf applauſe, which, however indelicate to preſent modes of thinking, formed, in his day, a common characteriſtic of learned men.

To gain a connected idea of Galen's additions to the ſyſtem of Hippocrates, whoſe imitator he profeſſed himſelf, it will be neceſſary to follow the ſame plan adopted in conſidering the works of that more pure original, of which the copy too often exhibits a diſtorted reſemblance.

CHAP.

CHAP. II.

OF THE ANATOMY, PHYSIOLOGY, AND PATHOLOGICAL SKILL OF GALEN.

GALEN is very eloquent on the importance of anatomy, as the foundation of all uſeful knowledge in medicine, and compares a phyſician's ignorance on this ſubject, to that of an architect beginning to build without order or plan.

Whatever opportunities he might have had of examining human bodies at the ſchool of Alexandria; it is pretty certain, that public and religious prejudices reſtrained the freedom of ſuch examinations at Rome. The greateſt part of his reſearches, therefore, terminated in the comparative anatomy of brutes, for which purpoſe he generally choſe the ape for diſſection, as bearing the neareſt reſemblance to the figure and ſtructure of man.

In Galen's minute deſcriptions of the brain and it's appendages, are to be ſeen conſiderable advances in the knowledge of theſe important parts, from the time of their real nature and uſes being firſt diſcovered. His accurate delineation of the courſe of thoſe nerves coming immediately from the head, and thoſe proceeding from the ſpinal marrow, proves the great care and perſeverance of his inveſtigations.

It was a peculiar part of his theory, to ſuppoſe a ſort of reſpiration carried on in the ventricles of the brain, by the air which gained admiſſion through the cribriform lamella of the ethmoid bone. Another of his original ideas was that of the animal ſpirits being elaborated in the vaſcular plexus, formed by the branches of the carotid arteries, and conveyed thence to the organs of ſenſe, from which they tranſmitted external impreſſions to the ſenſorium.

The firſt diſtinct notion of glandular ſecretion is to be found in his works, which clearly deſcribe the ſeparation of ſaliva from the

the blood, and it's diſcharge by an excretory duct.

Abating his ignorance of the true circulation, Galen's anatomy of the thoracic and abdominal viſcera would make no contemptible figure, amongſt the beſt modern treatiſes on the ſubject.

Reſpecting the generative organs, his imagination led him through all the mazes of fancy and conjecture, where every attempt to elucidate his opinions would be no leſs difficult than unprofitable.

The adoption of thoſe four ſuppoſed elements of nature, earth, air, fire, and water, as the component parts of the human body, forms the principal novelty of Galen's phyſiology. In the perfection and due proportion of theſe elements he places the ſource of health; the origin of ſickneſs in their defect, or improper mixture; and exerciſes the utmoſt ſtretch of imagination, in calculating the varieties of temperament and diſeaſe, depending on the varieties of their qualities and combinations. But his zeal

for

for ſyſtem, like that of other philoſophers, was compelled to leave many ſtubborn peculiarities to an occult cauſe, that final reſort of human ignorance. It ſubmitted likewiſe to the neceſſity of a partial intuitive ſenſe, for the ſervice of important organs, ſimilar to the ſuppoſed power of the ſtomach, which diſcerns things peculiarly congenial to it's purpoſe.

He aſſigned the powers of ſtimulating the body to three peculiar fluids, as the animal ſpirits diſtilled in the head for ſenſation and motion, the vital ſpirits elaborated in the heart for communicating heat, and the natural ſpirits depoſited in the liver for nutrition and increaſe.

The vaſt and extenſive outline of Galen's pathology can be conſidered only in ſome of it's moſt prominent features.

His diviſions of diſeaſe are ſcarcely leſs numerous, than all poſſible varieties and combinations of ill temperament and imperfect action can ſupply. Of their external cauſes, he reckoned ſix principal ones, to which,

which, becauſe they do not actually form a part of the body, was abſurdly given the name of non-naturals, viz. air, meat and drink, motion and reſt, ſleep and watchfulneſs, retentions and excretions, and laſtly the paſſions of the mind.

In theſe he ſought for the primary, or procatarctic cauſe, which firſt ſet in motion the prediſpoſing cauſes originating from ſome internal defect, and the proximate, which more immediately attend a diſeaſe in all it's ſtages, and which indeed conſtitute it's real eſſence. But his phyſiology of ſickneſs, like that of health, obliged him to admit ſo many ſpecific peculiarities, that the obſcure and occult cauſes frequently out-number thoſe, which he reckoned manifeſt and demonſtrable.

The ſame ſlavery of ſyſtem governed his conſideration of ſymptoms, which he ranged in very peculiar orders and claſſes. But though it would be uſeleſs to deſcribe all theſe minute and tedious diviſions and arrangements, we are compelled to notice his judicious care in ſeparating diagnoſtic from

from prognoſtic, and primary or pathognomonic from accidental or ſympathetic ſigns. Nor muſt we forget that candour, which allows of ſo many exceptions by his frequent acknowledgment of ſpecific ſymptoms, portending terminations wholly independant of common cauſes.

The little and equivocal notice of the pulſe, ſo remarkable in the writings of ancient phyſicians, is amply compenſated by the copiouſneſs of Galen, who, after making it the greateſt ſtudy of his life, left behind him ſixteen or ſeventeen different treatiſes on this ſingle ſubject. But here his imagination, fond of ſpeculating on new ground, led him to the extremes of affectation and abſurdity, where it would be more difficult to connect, or compreſs his redundancies, than in the wildeſt and moſt extenſive of his other ſpeculations.

It can only be ſaid, that by conſidering it in the ſenſes of abſolute and relative, ſimple and compound, he finds as many varieties as the moſt ingenious calculator could wiſh, joining

joining every poſſible induction from the quantities, degrees, and times of it's motion and reſt, dependant on the peculiar tone of the veſſels, or the condition of the fluid they contain. The conſtancy or inconſtancy of it's equalities and inequalities, it's regularities and irregularities, ſeem indeed to have afforded him an abundant exerciſe of fancy. It muſt, however, be confeſſed, that ſome of his terms and characters are ſtrongly indicative of peculiarities, which more conciſe ſyſtems find it difficult to explain.

Galen's attention to the pulſe led him to obſerve with great exactneſs thoſe reciprocal actions of the heart, to which he firſt gave the names of ſyſtole and diaſtole. And, perhaps, in the probable views of gaining great advantages, from an accurate ſtudy and knowledge of theſe actions, is to be found the beſt apology for the extravagances of his theory relating to it.

But in concluding the ſubject, it is mere juſtice to acknowledge his prudence, which teaches the neceſſity of comparing the ſtate of the pulſe with all other ſymptoms, before

a final judgment of any diſeaſe is formed. Nor are many ſimilar cautions, on other occaſions, unworthy of being conſidered as the warning lights of reaſon, in the midſt of much enthuſiaſtic obſcurity.

CHAP.

CHAP. III.

OF GALEN'S THERAPEUTIC AND PHARMACEUTICAL KNOWLEDGE.

THE generality of Galen's practical maxims, both for the prevention and cure of diſeaſes, differed but little from thoſe of Hippocrates.

In his declamations againſt the precipitate interference of art, and the neglect of proportioning the agent to the patient, he reſembles the moderation of his great original, whom he likewiſe imitates, by ſtrongly inculcating the neceſſity of aſſigning a proper importance to every relative, as well as direct circumſtance of a caſe, before any ſpecific practice be inſtituted.

His cautions reſpecting that equivocality of common appearances, which ſo frequently leads common practitioners into the moſt fatal error, are of the greateſt practical

tical importance; as are alſo his directions to keep in conſtant view the primary cauſe of a diſorder, though it be laſt diſcovered, without neglecting any ſupervening ſymptoms, that may portend danger in a ſecondary way.

Like his predeceſſors, copious bleeding was one of Galen's moſt general and powerful remedies. In ſome acute diſeaſes, he ſcrupled not to take away from his patients fifty ounces of blood in a day.

The medicinal ſubſtances uſed by Hippocrates were generally given ſingly, and in the moſt ſimple forms. Deviations from this rational cuſtom had extended to an incredible degree before Galen, much of whoſe time was employed in arranging and reducing to order the multifarious compoſitions of his predeceſſors. But to the labour of methodizing, he added zeal to enlarge the overgrown catalogue, and thus became the founder of a new pharmacy, which the ſcience of modern times has found it neceſſary greatly to curtail. Excepting however the number of ingredients, ſuppoſed to poſſeſs ſimilar qualities,

heaped

heaped together in boundleſs profuſion, the ſimplicity of this pharmacy, conſiſting in the mere operations of powdering, boiling, or infuſing, is ſtrikingly contraſted by the more active ſcrutinies of a modern elaboratory.

After what has been ſaid of Galen's attachment to ſyſtem, it is no wonder, to find his claſſification of medicines, analogous to that of his general pathology.

In conformity with his doctrines of humours and elements, he ranked every individual ſubſtance, according to it's actual or potential qualities of heat, cold, dryneſs, or moiſture. Each of theſe he again ſubdivided into four inferior orders of quantity or degree, the multiplied reſults of which may be conceived, by tracing the plan through any ſingle material, which may be hot in the firſt, ſecond, third, or fourth degree, and dry in any one of them, or cold and moiſt in the ſame ſort of varying proportion. This fanciful diſpoſition was extended to all ſorts of compounds, the effects of which were looked for in a ratio of their combined qualities, forming a ſtore of remedies exactly appropriated

to every diſeaſe, in which the diagnoſtic ſymptoms were obvious and unequivocal.

When theſe effects were produced in a manner, not perfectly conſonant to ordinary principles, or ordinary practice, they were attributed to a peculiar action of the whole compoſition, which then became a ſpecific, adapted to the removal of ſome occult cauſe. But of ſpecific remedies Galen was generally very ſparing, always preferring thoſe, in which ſome certain fitneſs to the diſeaſe was obvious.

The Galenical pharmacy, as it is deſcribed by this imperfect outline, remained, for ten centuries, a perfect code, or ſealed book, from which the practitioners of medicine in our hemiſphere thought it little leſs than ſacrilege to deviate, even on the moſt minute occaſions.

CHAP.

CHAP. IV.

OF THE GENERAL STATE OF MEDICINE IN THE GREEK OR EASTERN EMPIRE, FROM THE TIME OF GALEN TO THAT OF THE ARABIANS.

THE hiſtory of ancient Rome furniſhes no memorials of medicine after Galen's death, which happened at the commencement of a long and extraordinary ſtagnation in human learning.

To whatever cauſes the fall of Roman greatneſs be aſcribed, there is no difficulty in aſſigning to the convulſions which accompanied it, the moſt fatal effects on the proſperity of liberal ſcience. But in eſtimating the peculiar circumſtances, which combined to change the intellectual ſtate of mankind, the nature and power of thoſe principles and opinions, introduced by the eſtabliſhment of a new religion, muſt be added to the general influence of political diſtractions.

The worſt of theſe principles may eaſily be traced to the abuſes, which made of this religion a political engine, to forward the fraudulent deſigns of ambition or avarice. Nor is it leſs evident, that both theſe paſſions conſpired to obſcure the excellence of chriſtianity, by inſtilling into the moſt zealous of it's converts that contempt of mere human knowledge, which became one ſource of literary declenſion, that might have been obviated by a more juſt and reaſonable eſtimate of profane ſcience.

Prior, however, to the view of our art in it's loweſt degradation under eccleſiaſtical tyranny, we have to trace back it's courſe to Greece, with the tranſlation of the Imperial reſidence from Rome to Byzantium.

Conſtantine's eagerneſs, to make his new city the rival of that which he had deſerted, induced him to promote the eſtabliſhment of arts and ſciences with extraordinary munificence. The regulation and proſperity of medical practitioners was particularly attended to for this purpoſe, as appears from his elevation of the Archiatri, or court phyſicians

ſicians of Conſtantinople, to the ſenatorian rank, with an excluſive exemption from it's public duties.

His nephew Julian, though ſeldom friendly to the favourite projects of his uncle, not only confirmed theſe privileges, but perſonally treated all the profeſſors of medicine with reſpectful diſtinction.

Several inſtitutions of ſucceeding emperors, however incompetent to oppoſe the growing lethargy of learning, had a direct view to the improvement of this ſcience. For beſides the Archiatri of the palace, the Theodoſian code informs us of provincial Archiatri, each of whom had an annual ſtipend of two hundred and fifty thouſand ſeſterces, for ſuperintending the general intereſts and condition of their province.

All theſe public phyſicians the emperor Valentinian I. incorporated into a college at Conſtantinople, under the direction of a preſident, who had the title of Comes Archiatrorum, and was, in all political dignity, equal to the other comites or counts of the

empire, whoſe rank qualified them for the proconſular office. The ſame inſtitutions were extended to Rome, where twelve principal or ſuperintending phyſicians were appointed to preſide in the twelve quarters of the city. On ſuch foundations ſtand the political dignities of modern phyſicians, peculiar to thoſe countries of Europe, where any external forms of the lower empire ſtill ſubſiſt.

But in ſpite of all encouragement, the ſhort annals of Byzantine medicine exhibit the ſame feebleneſs of character, which ſtamped the genius of the times, and left a chaſm in learning nearly commenſurate with the long protracted duration of the Greek empire.

The firſt name in the ſcanty liſt is that of Oribaſius, the phyſician and friend of Julian, who made him quæſtor, and bore teſtimony to his fidelity through all the revolutions of fortune. His perſeverance in the faith of his patron, which expoſed him to a long and rigorous exile, proves indeed the firmneſs of his friendſhip, though the ſervility

lity of his profeſſional ſentiments allows but little claim to greatneſs of character.

In the ſeventy-two books which he compoſed on medical ſubjects, the cloſeneſs of his imitation deſervedly gained him the nickname of Galen's Ape. In the ſeventeen ſtill extant is the firſt mention of that ſtrange ſpecies of phrenzy, the lycanthropia, often deſcribed in the exaggerated pages of ſucceeding writers, in which thoſe affected are ſaid to have wandered like wolves by night, amidſt tombs and ſepulchres.

A more liberal copyiſt was Aetius Amidenus, ſo called from Amida, in Meſopotamia, the place of his birth, whoſe judicious epitome of Galen's writings has come down to us in tolerable order, through the hands of a tranſlator. In this work occurs the firſt deſcription of the dracunculus, that extraordinary worm in the fleſh, ſince known by the name of vena medinenſis, from it's frequency about Medina, the moſt reſpectable city of Arabia.

Of a ſtill ſuperior character was Alexander Trallianus, a native of Tralles, in Lydia, whoſe reputation in his life-time was of the ſuperlative kind, and whoſe orderly and perſpicuous works raiſe him above the ordinary claſs of Galen's ancient diſciples.

It may be thought a ſort of extraneous honour to medicine, to mention the names of Leonides, Theodorus Priſcianus, and Eunapius the hiſtorian, who are remembered for literary acquirements not immediately pertaining to the profeſſion in which they were engaged.

Vindicianus, the phyſician of Valentinian, of whoſe writings ſome fragments are ſtill in exiſtence, is celebrated as the firſt preſident of a medical college on record.

The fame of Jacobus Pſychreſtus, phyſician to Leo the Great, which procured ſtatues to his honour both at Athens and Conſtantinople, reſcues him from the oblivion, which overwhelms the names of his contemporaries.

In

In the hiſtory of Juſtinian's reign, we have an account of his phyſician Stephanus being ſent to the Perſian court, in compliment to Choſroes the Great, who demanded phyſicians from Conſtantinople, to teach in the medical college that he had founded in his royal city of Suſa. For this purpoſe, Tribunus, another eminent practitioner, remained there a year, and at his departure had his choice of rewards, which he liberally confined to the releaſe of a few Roman captives, but obtained that of three thouſand others, priſoners in Perſia, whoſe deliverance ſpread the fame of Tribunus over the empire.

At this period began the moſt violent and deſtructive plague recorded in hiſtory, which continued it's ravages with little intermiſſion from the middle of the ſixth to the beginning of the ſeventh century. Whatever credit be given to the account, which ſtates ten thouſand perſons to have frequently died in one day, in the city of Conſtantinople alone, it is certain, that it's deſolating fury has precluded any diſcoveries immediately relating

CHAP. V.

A SHORT VIEW OF ARABIAN MEDICINE.

A SUDDEN and entire revolution in the principles and political ſtate of a whole nation ſeems like an event, independent of the cauſes that influence the ordinary ſucceſſion of human affairs. Such an event, however, occurs in the hiſtory of the Arabians, whoſe paſtoral manners were changed at once, by the reſiſtleſs impulſe of religious enthuſiaſm, to a ferocious and warlike character, almoſt ſuperior to every obſtacle of art and nature.

But amidſt the bigotry, which imagined in the doctrines and revelations of their prophet, a perfection that ſuperſeded all human knowledge, the healing art appears to have been generally excepted from the contempt, with which they regarded other branches of ſcience.

For

For the firſt and fierceſt of Mahomet's ſucceſſors, the victorious Omar, who in a moment ſnatched the ſceptre from the ſucceſſors of Cæſar, and deſtroyed in one conflagration the accumulated learning of the world, thought proper to exempt medical works from the general ſentence, that condemned all other books to the flames. With their writings likewiſe the perſons of phyſicians were ſecured from the carnage, which ſwept away their fellow-citizens.

The ſame excluſive regard ſeems to have deſcended in ſucceſſion to all the conquerors and princes of the Mahometan world, who frequently treated medical practitioners, though infidels to the faith of Mahomet, with a diſtinction ſcarcely compatible with the principles of their religion, or the ordinary pride, and political ſeverity of their manners. Indeed many Kaliphs, both of Syria and Egypt, did not ſcruple to elevate their unbelieving phyſicians to the higheſt dignities, and to the ſupreme offices of Viziers, or firſt miniſters of ſtate.

Of

Of the pecuniary munificence, with which medical ſkill was rewarded amongſt Muſſulmen, a ſingular inſtance occurs in the hiſtory of Gabriel, phyſician to the famous Aaron Al Raſchid, and one of the Bactiſhua family, which, for it's fertility in medical practitioners, may be compared to that of the Aſclepiades amongſt the Greeks.

This favourite of fortune, having cured the paralytic arm of a young and beauteous Sultana, by offering a public inſult to her modeſty, as a ſtimulus to the ſuſpended action of the limb, grew into ſuch fame, that he monopolized the public confidence, and amaſſed the wealth of a prince. From his maſter the Kaliph he received one hundred and ten thouſand drachmas in gold for his annual ſalary, ſixty thouſand for his board wages, fifty thouſand for his apparel, and fifty thouſand for taking care of the ſeraglio; beſides fees and preſents of great value when he was conſulted, and eſpecially for bleeding the ſovereign, which he did two or three times in a year, by way of precaution. From other patients he received ſo much money, and ſo many valuables, that the

treaſury

treaſury and wardrobe of Gabriel excelled thoſe of ordinary monarchs.

From the works of Abi Oſbaia, one of their oldeſt authors, who wrote the lives of three hundred Arabian phyſicians, we learn, that the medical profeſſion was hereditary amongſt his countrymen, at a very early period. A cuſtom ſo calculated to prevent improvement, was doubtleſs one cauſe of the imperfection of their medicine, though it's peculiar and mean ſervility might be owing in part to the ignorance of thoſe, who tranſlated for their uſe the Greek writers on this ſcience.

The firſt of their medical books appears to have been a compilation in the Syriac language, made at the beginning of the ſeventh century, ſomewhat more than fifty years from the commencement of the Hegira, by Aaron, a chriſtian prieſt of Alexandria, from a Greek work called the Pandects of Medicine. It was two hundred years afterwards, before they got poſſeſſion of the works of Hippocrates and Galen, which were brought to Bagdad, with thoſe

of

of Ariſtotle and Euclid, by the chriſtian Honain, whom the reigning Kaliph had ſent to the weſt in ſearch of learned books.

The firſt of their authors, with whoſe works we are acquainted, is Meſues; who, in conjunction with Gabriel Bactiſhua, had the management of the great hoſpital at Bagdad, though he was a chriſtian of the Neſtorian ſect, ſo prevalent at that time in the eaſt.

In the ſame city flouriſhed Rhaſes, a native of Perſia, whoſe voluminous works and tranſlations from Greek writers amounted to two hundred and twenty-ſix treatiſes, in which occurs the firſt mention of that important diſeaſe the ſmall pox, the certain ſources of which, like the myſterious ſprings of the Nile, have hitherto baffled the moſt ſcrutinizing inquiry. Rhaſes alſo firſt treated of the ſpina ventoſa, and is the moſt ancient writer in exiſtence on the complaints of children. He may likewiſe be ranked with the firſt introducers of chymiſtry to an alliance with the healing art.

The

The next in point of time, but ſuperior in reputation, was Avicenna, born at Choraſan in Perſia, and a teacher of medicine at Iſpahan, the metropolis of that kingdom. This premature genius began at the early age of ſixteen years, to give lectures in various ſciences, and grew to ſuch eminence, that the future ambition of his countrymen ſeldom exceeded that of abridging and commenting on his voluminous works.

The fire of Mahometan zeal, after ſpreading with unparalled rapidity over the beſt parts of Aſia and Africa, at length extended itſelf to Europe, where it's fervor ſeems to have diminiſhed in ſome proportion to the more moderate temperature of the clime.

After the conqueſts and final ſettlement of the Moors in Spain, we find that country abounding in ſeminaries of medical education, from which the reſt of Europe was long furniſhed, both with practitioners, and books of the ſcience.

Many circumſtances, that indicate the very low ſtate of general knowledge in thoſe

times, particularly characterize the ſcanty and imperfect means of information within the reach of medical ſtudents. Of this kind is the ſtory of Louis the XIth, king of France, being compelled to give a pledge of immenſe value, with a bond from one of his richeſt nobles, before the Univerſity of Paris would entruſt him with the works of Rhaſes, which he had a fancy to read.

At Seville, the centre of Mahometan power in Spain, lived the celebrated Avenzoar, who by good management preſerved his health and vigour to the age of one hundred and thirty-five years.

Here likewiſe flouriſhed the more famous phyſician and philoſopher Averrhoës, denominated the ſoul of Ariſtotle, in honour of his ſubtle comments on that illuſtrious author, which formed the text of every metaphyſical ſchool in Europe, till the new lights of ſcience obſcured the glory both of the original and the copy.

Albucaſis, or Alſaharavius, is the laſt name of repute, the ſtyle and matter of whoſe

whoſe remaining works diſplay by contraſt the meaneſt of modern medical eſſays to great advantage.

To Arabian phyſicians acknowledgments are due for ſome important and uſeful additions to the materia medica, and particularly for the introduction of ſena, manna, rhubarb, and caſſia, thoſe gentle ſubſtitutes for the ſevere and draſtic remedies of antiquity. The uncertain and ſuperſtitious nature of their chymical knowledge would make it a taſk of difficulty, to aſcertain it's preciſe extent, and would ſcarcely repay the labour of examination.

CHAP. VI.

THE STATE OF MEDICINE IN EUROPE IN THE DARK AGES, PRIOR TO THE RESTORATION OF LEARNING.

IN purſuing the progreſs of medicine, our next attention is drawn to the view of it's low and mean condition in Europe, during that intellectual darkneſs, which followed the deſtruction of Roman power, and overſhadowed the weſtern parts of Chriſtendom, for a period of ten centuries. In the obſcurity of this mental chaſm, we muſt reſt ſatisfied with ſuch unimportant memorials, as better times would ſcarcely deign to remember.

In aſſigning the ſubjugation of reaſon and reflection to the prepoſterous authority of the Romiſh Hierarchy, no diſreſpect is intended againſt the pure principles of true Chriſtianity, which have ever tended to enlighten the underſtanding, and humanize the paſſions

paſſions of mankind. But when, in the hiſtory of our art, we ſee this authority exerted in forbidding the ſtudy of uſeful authors, and ſubſtituting pretended miracles for the remedies of nature and common ſenſe; that monopoly of learning, which gave unreaſonable pre-eminence to the prieſthood, may be fairly imputed to motives leſs honourable and diſintereſted, than it's advocates have generally aſſigned.

Indeed no cenſure ſeems extravagant for that craft, which made maſſes, penances, and pilgrimages, the chief articles of the materia medica, and the endowment of a church, or a monaſtery, the moſt infallible panacea for diſeaſes of the human body. Nor can it be ſevere, to call that the moſt diſgraceful of all quackery, which gave to the meaneſt of canonized and conſecrated trumpery, more ſanative virtues than ever were looked for in the preſcriptions of the moſt experienced phyſician.

The abſurdity of eccleſiaſtical interference in medical matters is further evidenced by many papal and ſynodical reſtrictions, to

preſerve the clerical purity of thoſe, whom the love of gain engaged in medical occupations. The ſingle prohibition, which hindered them from any ſpecies of anatomical inveſtigation, and forbade their preſence at the opening of a dead body, was ſufficient to prevent their improvement in the buſineſs they were allowed to follow, and ſerved to throw the operative part of our art into vulgar and illiterate hands, by whom it has long been retained in the moſt illiberal bondage.

It would be no leſs painful than uſeleſs, to purſue this ſubject, further than to obſerve the failure of every attempt to evade this uſurped cognizance, evinced in the lamentable fate of enquiring phyſicians, many of whom were puniſhed with death, or confined in inquiſitorial dungeons, under pretence of magical practices.

Turning, therefore, from one diſguſting picture to another, it is a relief to contemplate our ſcience under a different ſpecies of ſlavery, ſtill diſgraceful, but leſs inhuman and ſevere.

The

The fluctuation of human affairs has ſeldom been more ſtrongly exemplified, than in the ſpectacle of Greeks and Romans, learning the corrupted rudiments of knowledge from Arabian maſters. But of all ſciences, the art of healing ſubmitted the longeſt and the moſt completely to the indignity of receiving impure and polluted ſtreams, in the very place where the genuine ſources were at hand.

In the ſouth of Europe, Saracenic inſtructors were every where engaged in teaching an heterogeneous medicine, partly compounded of credulous tradition, and partly learnt from the moſt ignorant comments on the meaneſt tranſlations of Hippocrates and Galen.

The Lombards, and their ſucceſſors the Normans, who ſettled in the moſt fertile provinces of Italy, had each been ambitious of rendering Salernum, a city in the heart of their dominions, the centre and emporium of ſcience. It's favourable ſituation made it the natural repoſitory of all the ſcientific novelties, brought by returning cru-

faders from the Holy Land, and conſequently the moſt important ſeminary for public education in Europe. But Salernum was peculiarly diſtinguiſhed as the city of Hippocrates, though this venerable author was known there only in the baſe concealment of his Arabian dreſs.

Of the little progreſs of Salernitan doctors in rational medicine a curious ſpecimen is afforded by the well-known Schola Salernitana, that poetical jumble of traditionary precepts, collected and dedicated by the whole College to Robert, duke of Normandy, ſon to William the Conqueror, who ſtaid at Salernum for the cure of a wound received in Paleſtine. The frequent republication of this whimſical performance, with pompous and prolix commentaries, ſtrongly marks the ſuperficial character of thoſe ages, which received it as an adequate and obligatory code of general practice.

The durable reputation of the Salernitan ſchool, as a place of medical education, is proved by many documents, from it's foundation in the ſeventh century, to that public

public edict of the emperor Frederic the IId, in the thirteenth century, prohibiting any one to practiſe phyſic in the empire, without a licence under the Hippocratic ſeal of Salernum.

From the hiſtories of ſucceeding emperors are to be collected many ordinances for the regulation and improvement of medicine, in the other Italian ſchools of Bologna and Padua, which were imitated in the rival Univerſities of Paris and Montpellier. But in all theſe ſeminaries, mental freedom was ſo much degraded by ſubmiſſion to Saracenic authority, that medical ſtudents were compelled to receive as oracles the barbarous works of Avicenna, whoſe infallibility conſtituted a primary article of faith.

Amongſt the few names in the annals of medicine, which throw a glimmering luſtre over the mental obſcurity of ſo many generations, the firſt on record is that of the monk Conſtantine, ſecretary to Robert Guiſcard, duke of Apulia, in the eleventh century, who compiled a medical work for the uſe of his countrymen.

The

The ſucceeding age furniſhes a more eminent medical adept in the illuſtrious perſon of John of Procida, a man of high birth and noble courage, which he ſignalized, both in contriving and executing the maſſacre of the Sicilian veſpers, that ſevere, though juſt and patriotic revenge on the French invaders of his country's freedom and peace.

The thirteenth century affords a few ſolitary inſtances of genius and independence, ſtruggling in obſcurity and fear. In Italy, Petrus Aponius firſt ventured to publiſh his medical ſentiments, without the Pope's leave, for which his effigy was burnt in the market place at Padua, himſelf having fortunately eſcaped the flames by dying in priſon, before ſentence could be executed.

About the ſame period, the learning of France and Germany received a new impulſe from the laborious zeal of two extraordinary characters. In the former country Arnauld de Villeneuve, more commonly known by his latin name of Villanovanus, made himſelf known by a vaſt variety of medical

medical publications, the principal novelty of which conſiſted in adding the myſteries of occult philoſophy, and the abſurdities of aſtrology, to the medicine of the Arabian ſchools. By theſe means his fame was extended to the remoteſt parts of Europe, and his advice every where ſought for as the moſt certain and infallible of human remedies.

His counterpart, Albertus Magnus, the firſt literary phenomenon of Germany, left behind him in twenty-one folio volumes a ſimilar farrago, perhaps the moſt enormous of human compoſition, in which the utmoſt labour to ſeparate reaſon from fancy, or truth from falſhood, would be repaid by diſappointment, and loſs of time.

CHAP. VII.

ON THE EARLY STATE OF MEDICINE IN ENGLAND.

IT would be flattering to the pride of patriotiſm, to find amongſt our own countrymen any exception to the reproach of general ignorance, in the dark ages we have been ſurveying. But truth compels us to acknowledge, that in the groſs and barbarous manners of our anceſtors, there are as few veſtiges of ſtudy or rational inveſtigation, as in thoſe of the moſt illiterate nations of antiquity. Nor was their progreſs in the acquiſition of uſeful knowledge leſs tardy in any of it's branches, than in their medicine, which conſiſted wholly of pretended ſecrets, or abſurd rites and incantations, practiſed by the loweſt and meaneſt of the people.

Amongſt the Britons, the Druids, who monopolized all the knowledge in exiſtence, were

were perhaps acquainted with the medical virtues of ſome plants, though the moſt flattering accounts afford very ſlender evidence of their pre-eminence in the art of healing.

That there were phyſicians, or rather ſurgeons, by profeſſion, in the courts of their princes, who had eſtabliſhed themſelves beyond the reach of Engliſh invaders, appears from the regulations in ſome Welſh laws, which aſſigned to them the twelfth place of dignity, and appointed eſtabliſhed fees, for certain cures and operations. Thus, for a ſimple or fleſh wound, the garments of the wounded perſon that were ſtained with blood became the perquiſite of the ſurgeon, who was allowed a fee of one hundred and eighty pence, and his maintenance, or one pound without maintenance, for the cure of every dangerous wound. He was likewiſe entitled to demand twelve pence when he uſed red ointment, but was confined to fourpence for any ointment of common herbs.

The annals of the 12th century, furniſh the earlieſt mention of medicine being ſtudied

died as a ſcience in the univerſity of Oxford, whither the impure doctrines of the Salernitan ſchool were imported about this æra. But it was almoſt wholly taught and practiſed by the clergy, who, like thoſe of other countries, found it a ready road to riches and honour.

The diviſion of theſe practitioners, at ſo early a period, into phyſicians, ſurgeons, and apothecaries, ſeems to have originated partly from eccleſiaſtical reſtraints, prohibiting the regular orders of the clergy from practiſing particular branches, which ſeemed diſcordant to their holy profeſſion, or which required any long abſence from their ſacred duties.

It will appear ſingular, that, amongſt theſe practitioners, the compounder of medicines ſhould have been in higher eſtimation than the other claſſes, without recollecting that the myſteries, with which he was ſuppoſed to be acquainted, peculiarly recommended him to the ſuperſtitious reverence of the times. As an inſtance of this ſuperiority, may be mentioned Richard Fitz-nigel, who, from

from the office of apothecary to Henry the IId, was promoted to the biſhopric of London.

The ſudden and ſhort-lived ſplendour reflected on medicine in the thirteenth century, from the wonderful and ſolitary ſcience of our countryman, Roger Bacon, was ſoon obſcured by the envious jealouſy of his monkiſh brethren, who too eaſily ſucceeded in their attempts to extinguiſh that light, which threatened the ſtability of their uſurped authority over the common ſenſe of mankind.

The immenſe diſtance between this firſt of our experimental philoſophers, and his more immediate followers, in the career of knowledge, furniſhes an humiliating picture of human intellect ſliding back with rapidity from the ſolid ground, on which it had juſt gained a ſlippery footing, to the ſame dark abyſs of falſe reaſoning and arbitrary conjecture, where it's powers had ever been conſumed in able and ſuperſtitious trifling.

It would be matter both of patriotic and profeſſional congratulation to find, in a long ſucceſſion of the medical practitioners of our country, a ſingle character upon whom the example of this enlightened friar had the ſmalleſt influence. But we are condemned, through ſucceſſive centuries, to accept the accidental credit reflected upon our art, from every literary accompliſhment of eccleſiaſtical doctors.

Hugh of Eveſham, better known under his Latin name of Hugo Atratus, was promoted for ſkill in medicine, amongſt other attainments, to the dignity of Cardinal, by Pope Martin the IVth. Nicholas de Fernehom, phyſician to Henry the IIId, was made Biſhop of Durham on the ſame account. A biſhopric was likewiſe conferred by Pope Paul the IId, on John Phreas, another Engliſh doctor, during his abode in Italy, where his claſſical accompliſhments procured him the ſingular honour of being choſen to compoſe an epitaph for the tomb of Petrarch.

In

In the works of Gilbertus Anglicus, a lay practitioner, and the oldeſt medical author of England now extant, may be ſeen a very mortifying ſpecimen of our early medicine. But the Roſa Anglica, a famous production of John of Gaddeſden, the moſt eminent lay phyſician of the fourteenth century, exhibits a ſtill more diſgraceful picture, far below compariſon with any illiterate diſplay of modern quackery. Nor is the credit of the ſcience much ſupported, by the more reſpectable writings of John Ardern, the firſt ſurgeon of note, from which we learn the cuſtom that anciently prevailed, of taking bonds from patients to ſecure payment, if a cure were effected.

In the humorous, poetical deſcription of an old Engliſh phyſician, left us by Chaucer, we behold a pretty exact counterpart of the aſtrological and conjuring doctors of later times, whoſe appurtenances of magical and magnetic ſigns, have wonderfully ſucceeded in exciting the thoughtleſs applauſe of ignorance and credulity. Nor is the urinal which enriches the portrait, a bad emblem

of the myſtery of ſome more cautious impoſtors, who, under pretence of particular and excluſive penetration, have gained a better ſort of notice, whilſt they merited only correction and contempt.

MEMOIRS

MEMOIRS OF MEDICINE, &c.

BOOK IV.

ON THE PROGRESS OF MEDICINE,

FROM THE

RESTORATION OF LEARNING

TO THE EIGHTEENTH CENTURY.

BOOK IV.

CHAP. I.

OF CIRCUMSTANCES CONDUCING TO THE IMPROVEMENT OF MEDICINE, ABOUT THE TIME OF THE RESTORATION OF LETTERS.

THE reviving taſte for letters, which diſtinguiſhed the 15th and 16th centuries of our æra, has been aptly compared to the ſlowly riſing dawn, that gradually diſpels the ſhades of night. But the moſt vigorous beams of ſcience have not yet penetrated through all the obſcurities of intellectual darkneſs, though they have ſufficiently illuminated the face of medicine, to afford a more pleaſing view of it's ſurmounting the thickeſt clouds of prejudice and unreaſonable authority.

It would be ſuperfluous, to repeat the well known circumſtances, concurring to excite

a public paſſion for the literary ſtores contained in Greek and Roman authors, that had lain for ages in oblivion and neglect. No ſooner was the wholeſome influence of this paſſion viſible in the growing health and vigour of general learning, than it ſpread with rapidity amongſt the teachers and ſtudents of the healing art, urging them to the ſtudy of thoſe original writings, from which it's beſt rudiments have ever been drawn.

This enthuſiaſtic emulation, originally communicated to Europe by the fugitive Greeks, retreating from the enemies of the Chriſtian name, was for ſome time confined to Italy, where, of courſe, are to be found thoſe eminent phyſicians, who ſtand firſt in the claſs of modern reformers.

But here the progreſs of our narrative muſt be delayed, to confeſs the obligations of our art to thoſe diſtinguiſhed perſonages, who, by their liberal encouragement of learned men, conſulted the happineſs and comfort of mankind. Honourable mention is particularly due to ſeveral princes of the Medici family, who, amidſt their bounties

to

to general ſcience, allotted handſome ſtipends both to teachers and ſtudents of medicine in the various ſeminaries of that age, moſt of which acknowledged the control either of their authority or example.

In this place, likewiſe, muſt be noticed a ſingular and important circumſtance relative to our ſubject, which occurred about this period of time.

Soon after the diſcovery of a new hemiſphere, Europe was ſuddenly overrun with an unknown diſeaſe of ſuch magnitude, as led to extraordinary ſpeculations on it's nature, and extraordinary diligence in ſeeking for it's cure. And indeed the venereal virus, before it's ſpecific remedy was diſcovered, muſt have been an object of great alarm, not leſs from the obſcurity of it's ſource, and the extent of it's ravages, than from the peculiar and diſguſtful ſymptoms of it's progreſs.

In the hiſtory of a diſorder, marked by ſuch appropriate characters, it ſeems ſtrange to find cauſe of diſputation and doubt, re-

lating both to the time and place of it's origin. From the mention made by ancient authors of the evils ariſing from impure coition, ſome ſuppoſed, that it had always exiſted under other names, however it might have been aggravated in it's courſe, or ſtrengthened in virulence by accidental combination with other depraved humours. Others ſought it's fountain in the diſtant and newly found regions, where animal poiſons were highly exalted by a favouring clime, and whence it's contagious ſtreams were conveyed, by the numerous channels of illicit intercourſe, to Europe. Such a ſuppoſition explains the phenomenon of it's blazing at once like a conflagration, ſpread by contending winds, in which the dazzled eye ſees the flame burſting from every quarter at once.

The annals of medicine furniſh an event of ſimilar novelty and alarm in the ſweating ſickneſs, which began not long afterwards, and, though more ſuddenly fatal, was happily of much ſhorter duration than the venereal infection. This epidemic diſeaſe, which was thought to have it's origin,

and

and certainly raged with peculiar violence in England, had ſo quick a criſis, that it was diſtinguiſhed by the name of Ephemera Britannica. From the beſt accounts, this ſingular fever ſeems to have been of the moſt ſimple, though the moſt acute kind; but though it prevailed more amongſt the rich than the poor, and returned twice at the diſtance of ſeveral years, the phyſicians of our iſland never agreed upon the proper methods of treating it.

CHAP. II.

OF THE PRINCIPAL PHYSICIANS CONCERNED IN RESTORING THE CREDIT OF ANCIENT MEDICINE.

AT Padua, which has ever been the chief medical ſeminary of Italy, ſince the reſtoration of letters, Alexander Benedictus firſt ventured to queſtion the authority of Arabian doctors, and publicly to engage in anatomical inveſtigations.

In the ſame place the venerable Nicholas Leonicenus, the fire of whoſe profeſſional zeal was unabated at the age of 96 years, publiſhed the firſt Latin tranſlation of Galen's works. To Theodorus Gaza, his contemporary, the tranſlator of Ariſtotle and Theophraſtus, the medical world was indebted for the firſt verſion of Hippocrates's Aphoriſms. From the ſame ſchool came the Syphilis, that admired poetical deſcription of the lues venerea by the noble Fracaſtorius, whoſe claſſical acquirements diſtinguiſhed him

him amongſt the moſt eminent ſcholars of his day.

About this period of time the manual branch of healing was much attended to, and greatly improved, eſpecially by the lectures and publications of Jacobus Berengarius, commonly called Carpus from the place of his birth, who taught in the Univerſity of Bologna. It was likewiſe conſiderably advanced by his contemporaries Johannes de Vigo, and Marianus Sanctus, who firſt made public the method of cutting for the ſtone, called the operation of the ſtaff, which he had learned from Johannes de Romanis, a ſurgeon at Cremona.

The intercourſe maintained between Germany and Italy, by the frequent viſits of the Imperial court to Rome, opened a quick and eaſy paſſage for the new learning into the former country, in which the ſcholars ſoon became the rivals of their maſters, at leaſt in the number of their eſtabliſhments for promoting it's diffuſion, at the very commencement of the ſixteenth century. But to recite the names of thoſe, who promoted

moted the intereſts of medicine by their labours in theſe ſeminaries, would be to compoſe a great work. For the immenſe volumes of German authors, on any ſubject, have never equalled in number or magnitude thoſe relating to this ſcience, or more ſtrongly characteriſed their perſevering induſtry, hitherto unrivalled by other nations.

In France, notwithſtanding the boaſted and quick genius of it's inhabitants, ignorance and ſuperſtition have often been more ſingularly combined with ſuperficial ingenuity, than in any country of modern Europe. Their medical reformation in particular was impeded by the moſt ridiculous diſputes between the diſciples of the Arabian and Galenic ſchools, after the conteſt was almoſt univerſally decided amongſt their neighbours.

The year 1600 is diſgraced by an edict of the Univerſity of Paris, which drove Dr. Peter Briſſot into exile, for venturing to deviate from the eſtabliſhed cuſtom of bleeding in a pleuriſy, or any other local diſeaſe, in

in the arm oppoſite to the part affected, which was thought neceſſary to make a proper revulſion. That ſuch a diſpute ſhould have become a matter of univerſal concern, both in church and ſtate, no leſs than in the commonwealth of phyſic, deſerves to be recorded amongſt many other ſpecimens in the hiſtory of that people, of ſtrange national levity, contraſted with the moſt unreaſonable bigotry and intolerance.

To make amends for former ſcanty memorials of rational medicine amongſt our own anceſtors, the name of Linacre not only ſtands foremoſt in the catalogue of benefactors to the healing art, but ſhines a principal ornament of literature, at the moſt ſplendid æra of reviving ſcience. By him, this art was firſt wreſted from the hands of ignorance and impoſture, and a foundation laid for the preſent reſpectable ſituation of it's profeſſors in this country. The charter of Henry VIII, dated in 1518, which incorporated the phyſicians of London into a royal college, and transferred to them the government and ſuperintendance of it's

it's general concerns, was procured almoſt wholly by his zeal and aſſiduity in the cauſe.

Linacre was born at Canterbury about the year 1460, and after a courſe of ſtudies in the Univerſity of Oxford, he went to Italy in the train of the Engliſh envoy to the Papal court. The faſhion of letters, at that time in it's meridian, furniſhed means of gratifying his curioſity at every ſtep. From the lectures of the claſſical Politian at Bologna he acquired ſuch perfect knowledge of Latin, as enabled him to compoſe a grammar of it's rudiments, celebrated for perſpicuity, and nice diſcrimination in the idioms of that language. At Florence, he had likewiſe the good fortune of being permitted to attend the various learned lectures, given to the ſons of the Grand Duke. The good uſe he made of theſe opportunities may be collected from the ſuffrages of many eminent contemporary ſcholars, and particularly from the honourable teſtimony of Eraſmus, that phœnix of learning, who was his intimate friend and correſpondent. At his return home,

home, Linacre began to read Greek lectures at Oxford, and after taking his degree in medicine, was dignified with the appointment of royal phyſician, in which ſtation he continued to practiſe, during the reigns of Henry the VIIth, and his two immediate ſucceſſors, the laſt of which princes he likewiſe ſerved as tutor in the general learning of the age.

From ſome circumſtances mentioned of his two contemporaries, Butts and Owen, a farther idea may be formed of the conſequence of phyſicians in that day. The former was the only man, who dared to enter the cloſet of that proud and capricious tyrant Henry VIII, to repreſent the unworthy treatment, which archbiſhop Cranmer was ſuffering from the Lords of the Council, and the name of the latter was joined with thoſe of the higheſt rank as a witneſs to that king's will.

The moſt illuſtrious of Linacre's early ſucceſſors, and almoſt the rival of his fame, was John Kay, better known by his Latin name of Caius, who was ſo great an adept

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in ancient learning, that, in his travels through Italy, he lectured publicly at Padua, on the Greek text of Ariſtotle. To the College of Phyſicians he was a real benefactor, in many inſtances, and eſpecially in providing the means of diſſecting annually two bodies of malefactors, for the improvement of anatomical knowledge. But Caius ſerved the intereſts of literature ſtill more munificently, by his liberality to Gonville College, in the Univerſity of Cambridge, which has teſtified it's gratitude by adding his name to that of the original founder; and where the modeſt memorial of Fui Caius, which this learned man ordered as the inſcription on his tomb, remains as an impreſſive memento, that even the pride of learning, founded on the only real ſuperiority of man, ſtands on a baſis equally unſtable with the meaneſt vanities of his kind.

Of other medical characters at this period, little is known that deſerves repetition. Caldwell merits honorable mention, for procuring from the Lord Lumley a fund to defray the expences of an anatomical lecture, which ſtill continues to be read at the

College in London. William Bulleyne, a voluminous and verboſe author, is chiefly remarkable for having ſuffered a long and ſerious proſecution, for unſkilful treatment of a patient that died of a malignant fever. Thomas Vicary and John Banniſter, the former ſurgeon to Henry VIII, and the latter to Queen Elizabeth, were likewiſe conſiderable writers, though their remaining works furniſh no great evidence of real or uſeful progreſs in their art.

CHAP. III.

OF THE ORIGIN OF MEDICAL CHYMISTRY, AND THE CHYMICAL SECT OF PHYSICIANS.

IT has been already ſaid, that the materia medica of antiquity was at firſt wholly collected from the vegetable world, and very gradually enlarged by the addition of animal ſubſtances, and a few minerals for external uſe. But when exceſſive admiration, conſequent on diſcovering the treaſures of learning, in writers of diſtant times, led to the ſuſpicion of a golden age, in which men lived ſecure from the ravages of diſeaſe, medical practitioners became eager to unravel the ſecrets of ſuch imaginary happineſs. The wonders of chymiſtry, at all times adapted to excite curioſity, and dazzle the eyes of haſty inquiry, were no leſs ſingularly than ſeaſonably calculated, to confirm expectations of this nature.

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When fire was firſt applied to the analyſis of matter, is not certainly known. Nor are the early evidences of experiments for this purpoſe much to be depended on, notwithſtanding many voluminous compoſitions of credulity or impoſture, which bear a very ancient date, and deſcribe, in very hyperbolical terms, remedies capable of preſerving both corporal and intellectual vigour to an indefinite extent. Hence originated the faſcinating notions, that ſeized the minds of many ingenious phyſicians, and diſpoſed them to an abated reverence for the works of Galen, which had hitherto been received as an infallible code, both of theory and practice.

The Arabian article, prefixed to the name of chymiſtry, denotes, amidſt many other exiſting teſtimonies, the adulteration of ſcience, by their incorporated crudities. Great part of the fifteenth and ſixteenth centuries was employed by the Alchymiſts, in idle attempts, by combining different and inferior metals, to produce the moſt perfect and valuable of all.

But practitioners of the healing art were more univerſally captivated with this rage of tranſmutation, as the means of diſcovering the elixir of life, that infallible panacea of human infirmities before mentioned. The ſurface and bowels of the earth were ranſacked for the purpoſes of this fiery ſcrutiny, which, though unequal to it's prime intentions, gave occaſion to the firſt uſe of chymical compoſitions in medicine.

The adventurous hands, which firſt found them ſucceſsful in caſes, where milder remedies had been tried in vain, ſoon applied them with an indiſcriminate zeal, that overlooked thoſe of eſtabliſhed practice as trifling, or wholly uſeleſs. The violent and hazardous proofs of their power determined the more cautious, paſſionately to reject and decry their uſe. Thus commenced that war between the Galenical and chymical doctors, which, continuing with great acrimony for more than a century, equally diſgraced both parties, obſtinately bent againſt the confeſſion of mutual errors.

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To thoſe acquainted only with preſent improved modes of reaſoning on philoſophical ſubjects, it will appear ſtrange to hear of men, at a period of ſo much comparative light, influenced by arguments of the weakeſt kind, on ſubjects, the truth of which ſeems eaſily aſcertained by the exerciſe of common ſenſe, and a ſmall portion of common candour. Such, however, were many of the diſputants in queſtion, who could either admit the exiſtence of powers in matter, incompatible with the ſtate of humanity; or deny a progreſſion of ſcience, viſible in the ordinary experience of life.

The aberrations of human wiſdom are indeed ſingularly diſplayed in the hiſtory of alchymy, which not only exhibits the patient operator poring days, months, and years, over the crucible and retort, to extract the ſoul of metals, and the eſſence of immortality; but the divines, lawyers, and politicians of ſociety, ſeriouſly engaged in determining beforehand the morality, lawfulneſs, and public conſequences of individuals acquiring health, riches, and happineſs, by methods unknown to their fellow

citizens. If to the extravagance of alchymical pretenders be added the audacity of their contemporaries, the Roſicrucian philoſophers, and the folly of their admirers, the picture can receive no higher colouring from the moſt diſguſting features of credulity and impoſture.

Amongſt the characters celebrated for ardour in theſe purſuits, it will not be expected, that many traces of ſober and ſolid genius inveſtigating ſimple truth can be found. In the catalogue of chymical phyſicians two leading names occur, that may ſerve as patterns of the ſect, in the priſtine glow of it's zeal. This *par nobile fratrum*, Paracelſus and Van Helmont, we ſhall therefore join together, though by ſuch anachroniſm we violate the order of hiſtory.

Paracelſus was the ſon of a phyſician in Switzerland, where he was born in 1483. In his youthful travels, having diſcovered the compoſition of ſome famous medical noſtrums, and learnt the free uſe of mercury and antimony, he at once began his career

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of a reformer, at Baſle, a principal city of that country, and ſoon attracted public notice, not leſs by the novelty and boldneſs of his practice, than the high tone of his language and pretenſions.

His extravagant zeal for novelty is whimſically diſplayed in the character of the inviſible agent, whom he ſuppoſed the omnipotent Creator originally appointed to the taſk of finiſhing his beſt and moſt perfect work, man.

This myſterious officer he denominated Archeus, and compared him to a ſculptor engaged in ſeparating from a rude block the ſuperfluous matter, which veils the outline and form of a ſtatue. Thus he imagined the parts and organs of the human body lying concealed in the various articles of food, like the embryo leaves of plants in earth, till this agent of nutrition, by his ſkill in ſeparation and rejection, gave them that peculiar direction, neceſſary to the arrangement of a human body.

In compliment to the operations of this prime chymiſt, Paracelſus renounced the qualities and humours of Galen, which have ſome colour of nature for their foundation, and inſtituted a new diviſion of corporeal matter into three elementary principles of ſulphur, ſalt, and mercury, the various appearances of which he reconciled with wonderful facility, calling that red ſulphur which gives colour to the blood, yellow to the bile, and green to the fat.

To the ſaline matter, continually ſeparated from the aliment, he attributed all the phenomena of health and ſickneſs, according to it's proper or improper ſtate and diſtribution over the body, making it the ground of a ſpecific practice, long prevalent in medicine, depending on the notion of chymical combinations and decompoſitions. Thus every thing contrary to acidity obtained a place in the materia medica, amongſt which, alcaline and teſtaceous ſubſtances, from their real powers to act on the juices of the ſtomach, and alimentary canal, ſtill hold a conſiderable rank.

Similar

Similar credit is due to Paracelſus for proving the ſafety, if not for wholly introducing many other powerful remedies, which ſelfiſhneſs, bigotry, or timidity, ſtrenuouſly and unreaſonably oppoſed. But on this, or any other ground, it is impoſſible to excuſe his prepoſterous vanity in arrogating to himſelf the monarchy of medicine, or his aſſurance in pretending to an exemption from all pain and diſeaſe, and even the power of death itſelf. Of ſuch preſumption his ſhort life was the ſevereſt reproof, whilſt the charge of inſanity may be urged againſt his childiſh aſſumption of high titles, and the ſounding appellation of Philippus Aureolus Theophraſtus Paracelſus Bombaſt ab Hohenheim, which he commonly uſed inſtead of his more humble family name of Hochener.

For pre-eminence in the jargon and ſubtleties of chymical medicine, as Paracelſus may be reckoned the Aquinas, ſo Van Helmont may be called the Duns Scotus of the art. Like his prototype, he thought himſelf deſtined to reform and perfect the miſtakes and deficiencies of former ages. After trying

trying his ſkill in religion, where his warm imagination and fervent zeal ſoon hurried him into all the depths of metaphyſics and myſticiſm, he was determined to the ſtudy of medicine by a dream, in which he fancied himſelf aſſured of ſupernatural aſſiſtance.

With the inſufferable conceit of his precurſor, he was ambitious of embracing all the myſteries of occult philoſophy, within the comprehenſive ſcope of his aerial ſyſtem. To the offices of that imaginary compoſitor of the human frame, to whom Paracelſus had given a local habitation and a name, Van Helmont added the conſtant ſuperintendance of diſeaſe, through all the periods of human life. But the moſt extravagant abſurdities diſtinguiſh his Archeus in this employment, where he repreſents him as irritated and appeaſed by the outward qualities of colour, ſhape, or ſmell, both of the peccant matter, and it's appropriate remedy.

His alchymical reſearches after the philoſopher's ſtone, and the elixir of life, had an

an effect which he did not foreſee, by leading to the diſcovery of ſome unknown qualities and modifications in the elements of nature. The experiments of his elaboratory particularly led to an analyſis of that complex fluid the air, of which former philoſophers were ſtrangely ignorant; and his gas ſylveſtre contains the firſt recorded notice of elaſtic vapours in aerial forms.

In the higher regions of ſpeculation Van Helmont may be called the father and prince of modern enthuſiaſts, as he ſoared beyond all his predeceſſors, and bequeathed to poſterity a plentiful fund, which every poſſible variety of religious and fanciful reveries has not yet been able to exhauſt.

That the practice of this eccentric phyſician muſt have been ſingularly bold, appears from the multiplied teſtimony of his contemporaries, that his patients were generally cured or killed in two or three days. And it was perhaps on this account, as well as for his heterodoxy in matters of faith, that the inquiſition drove him from Bruſſels, the place of his birth, into Holland, where

he died in the year 1644 at the age of 56 years.

To fill up the chaſm between Paracelſus and Van Helmont, ſtands the name of Cardanus, who to all the abſurdities of the chymical ſect added the private vices, which degrade human nature.

The ſtrange medley of abuſed learning, contained in the ten folio volumes of this author, may be regarded as one of the cauſes, which tended to lower the credit of the chymical phyſicians, and reduce them to the neceſſity of a compromiſe with their antagoniſts, ending after many ſtruggles in that conſolidation of the old and new practice, which has been perpetuated to the preſent day.

CHAP.

CHAP. IV.

OF THE ADVANTAGES ACCRUING TO MEDICINE, FROM IMPROVEMENTS IN ANATOMY.

THE blind admiration, with which Galen's works were received after the reſtoration of learning, had generated the extravagant opinion, that nothing could be added to the ſum of his diſcoveries in the œconomy, or diſeaſes of the human body. But the boldneſs of the chymiſts, who firſt ventured to queſtion his authority on any ſubject, paved the way for more liberal and natural ſentiments, which ſoon appeared in the freedom of anatomical ſtudies about the commencement of the ſixteenth century.

The principal demonſtrator and teacher of human anatomy at this period was Jacobus Sylvius, a profeſſor at Paris, many of whoſe pupils carried with them an extraordinary enthuſiaſm for anatomical inveſtigations, into the various countries of Europe.

The

The moſt eminent and meritorious of theſe ſcholars was Andrew Veſalius, the deſcendant of a long line of medical anceſtors, who had flouriſhed in the polite courts of the Dukes of Burgundy. This illuſtrious man was born at Bruſſels in 1514, and made ſuch progreſs in medical ſtudies, that he was choſen profeſſor in the univerſity of Louvain, before he had attained the age of twenty years. Thence he attended the emperor Charles the Fifth in his expedition againſt his rival Francis the Firſt, in which ſervice he gained ſuch reputation, that he was ſolicited to give lectures in various univerſities of Italy. Before his thirtieth year, he publiſhed his well known anatomical plates, drawn from the life, which deſervedly entitle him to be reckoned the founder of rational anatomy.

By indefatigable exertions, Veſalius finally eſtabliſhed the cuſtom of diſſecting human bodies, in preference to thoſe of brutes. To accompliſh this purpoſe, the difficulties he had to ſurmount, and the vexations he ſuffered, form a curious and intereſting part in the hiſtory of his life, much of which was

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ſpent in counteracting the oppoſition of prejudice and religious bigotry. The dead bodies, which he procured, with infinite hazard, from gibbets and church-yards, he was compelled to hide in his chamber for weeks and months together, never daring to examine them before the dead of night.

Yet notwithſtanding all his caution, he was repreſented as a ſacrilegious monſter, devoid of Chriſtian faith and principle, and only eſcaped by his intereſt at court from the extreme effects of ſuperſtitious tyranny. Being condemned to the flames by the Inquiſition, under pretence of having opened the body of a Spaniſh grandee, before the laſt ſpark of life was extinguiſhed, the power of King Philip was exerted, to procure a commutation of this dreadful puniſhment, for a pilgrimage of atonement to the Holy Land, in returning from which, the unhappy anatomiſt periſhed by famine, after a ſhipwreck on a ſmall iſland on the Grecian Archipelago.

The example of Veſalius gave a quick and powerful impulſe, which produced many

many and important diſcoveries in the ſtructure and phyſiology of the human body. Realdus Columbus, his diſciple, preſided in the anatomical chair at Padua, and by his examination of the valves in the heart, proved the impoſſibility of the blood's reflux, according to the ancient and univerſal opinion.

The circuitous paſſage of this fluid through the lungs was likewiſe demonſtrated by the unhappy Michael Servetus, the celebrated martyr of Calvin's ſanguinary zeal. As ſuch a diſcovery obviouſly led to the ſuſpicion of the greater circulation, it is probable, that this extraordinary man would have arrived at this concluſion, and might have eſcaped the horrors of his fate, had not the infatuating ſpirit of the times tempted him to more ſpeculative and ſubtile enquiries.

Gabriel Fallopius, a profeſſor of Padua, firſt obſerved the tubular ſtructure of thoſe appendages, formerly called the horns of the uterus, and by this diſcovery laid a foundation for the theory of oviparous generation.

neration. The name of Bartholomew Euſtachius, another Italian, is perpetuated by thoſe accurate anatomical publications, in which was firſt deſcribed the interior diſpoſition of the cavities, where the auditory and olfactory nerves are expanded, and eſpecially that tube (called Euſtachian) which opens a communication between them. Their countryman Cæſalpinus diſcovered ſo much relating to the blood's motion, that it has been doubted, whether he did not entertain ſome indigeſted opinion of it's paſſing in a regular courſe through the whole ſyſtem of veſſels.

The zeal for anatomical ſtudies, which had been kindled by Veſalius in his repeated viſits to Italy, was ſoon communicated to more northern climes. In Holland, Peter Paaw re-publiſhed the works of this great maſter, and was the firſt who projected and formed an anatomical muſeum. At the ſame time Caſpar Bartholin made anatomy faſhionable in the north of Germany, whilſt the elder Riolan was carrying it to great perfection in France.

CHAP. V.

A MISCELLANEOUS CONTINUATION OF THE SUBJECT, TILL THE TIME OF HARVEY.

THE improvements in anatomy, added to the union of Galenical and chymical ſcience, formed a baſis for a more complete and uſeful medical ſyſtem, than has yet been exhibited in our hiſtory. In our farther progreſs, it remains to enumerate ſome of the moſt eminent ſupporters of this ſyſtem, who may be called the eclectics of their age.

But it will firſt be neceſſary, to obſerve the ſpeedy change in manual medicine, conſequent on the new and faſhionable modes of ſtudying human anatomy. From the conſiſtent form given to it by Hieronymus Fabricius, ſurnamed Aquapendens, from the place of his birth, who ſucceeded Fallopius

pius in the anatomical chair of Padua, this eminent phyſician gained the appellation of the father of modern ſurgery, and was honoured by the Senate of Venice with the Order of St. Mark, accompanied with a golden chain, and an annual penſion of a thouſand crowns. Nor was it much leſs improved in Germany by another Fabricius, called Hildanus, from Hilden, in Swiſſerland, where he was born, whoſe numerous works on every branch of our art well deſerve the reputation they have ſo long enjoyed.

In proceeding with names of conſiderable importance in the ſcience, we muſt ſtill look to Italy, where Victorius at Bologna, with Fumanellius and Montanus at Verona, were diſtinguiſhed as the prime authors and teachers of their age. Victor Trincavellius, of Venice, is remarkable for having gained yearly by his practice three thouſand pounds ſterling, an enormous ſum at that time. But his fellow-citizen, Alexander Maſſaria, deſerves more honourable mention, for employing the produce of his labour in the moſt extenſive charities, being

accuſtomed every week to give a portion of bread to one hundred poor people, with a dinner, and gratuities in money, on ſeveral feſtivals and holidays in the year.

The name of Sanctorius will be long remembered for his treatiſe *de Medicina Staticâ*, containing the moſt curious examination of cutaneous ſecretion, and it's proportion to other evacuations. Baptiſta Corteſius, a Bolognian phyſician, who, by force of genius and love of learning, raiſed himſelf from the loweſt to the higheſt rank of life, may be mentioned as an encouragement to diligence and perſeverance. Marcus Aurelius Severinus, anatomical teacher at Naples, amongſt other works left an original one on abſceſſes, including a minute account of every tumour in the human body. The ſame period is diſtinguiſhed by the formation of botany into a regular ſcience, by Proſper Alpinus, a medical teacher at Padua.

In France, under the princes of the houſe of Valois, phyſicians ſeem to have been careſſed and rewarded more than at any other period. Des Jardins, better known under

under his Latin name of Hortenſius, was the favourite of Francis the Firſt, and by his extenſive practice acquired great conſequence and vaſt riches, as did Vidus Vidius, an author and practitioner of great repute, who ſerved the ſame monarch.

Their importance, however, was greatly eclipſed by that confidential phyſician of Henry the Second, Fernelius, who has a high claim to diſtinction amongſt the inſtitutors of rational practice; though his ſyſtem of pathology, which he had the gratification of ſeeing eſtabliſhed over moſt parts of Europe, be forgotten.

In the attachment of Charles the Ninth, the brutiſh ſon of that monarch, to his enlightened ſurgeon Ambroſe Paré, we have a ſingular and ſolitary inſtance of medical credit, averting that miſerable fate, at the infamous maſſacre of St. Bartholomew, which no other claims of public or private merit, nor any connexion of friendſhip, intereſt, or blood, were able to prevent. The account of his brother and ſucceſſor, Henry the Third, the laſt of his race, at-

tending the daughter of his phyſician Duretus to her nuptials, and of the magnificent preſents which he made in honour of her father's merit, furniſhes another proof of high diſtinctions, unuſual in the later annals of medicine.

The profeſſional zeal of Andrew Laurentius, phyſician to Henry the Great, was evidenced by many publications, and particularly by his liberality in founding the firſt medical profeſſorſhip in the univerſity of Montpellier. Citeſius, a provincial practitioner, gave the earlieſt account of the endemic colic of Poictou, afterwards ſo extenſively and fatally known in other parts of Europe.

The works of Lazarus Riverius contain ample ſpecimens of uſeful practice, though his name has been oftener repeated for his mode of adminiſtering what is called the ſaline draught. Renatus Moreau, who ſignaliſed himſelf by his comments and tranſlations of Greek authors, was at the ſuperfluous labour of re-publiſhing the Schola Salernitana, with all it's ancient

gloſſes. From Baillou, an induſtrious and careful collector of facts, relating to the general ſtate of medicine in thoſe times, we are acquainted with the prevailing ſtyle of medical preſcriptions, which were frequently written in a medley of Greek and Latin, ſo interwoven, that it was almoſt difficult to determine, which of theſe languages was intended to predominate. But the moſt voluminous and indefatigable medical author of that day, in France, was the younger Riolan, a Pariſian doctor, the very peruſal of whoſe works would employ no ſmall portion of an induſtrious life.

In Spain, it is no wonder, that the influence of national bigotry retarded the improvement of medicine, as it did that of other arts. The Spaniſh phyſician, moſt eminent at this æra, was Amatus Luſitanus, a voluminous author, and the ſuppoſed inventor of bougies; who became remarkable by abjuring Chriſtianity, and turning Jew at Theſſalonica, to which place he fled from dread of the Inquiſition.

A treatiſe on the management of fevers, by Brudus, a Portugueſe of that day, who had been ſome time reſident in England, contains a ſingular exemption in behalf of our countrymen, whom he repreſents as unable, from their habits of good living, to bear the ſtrict and abſtemious regimen practiſed amongſt other European nations.

The merit of German phyſicians at this period muſt have been very great, if it be rated in any proportion to the number and ponderoſity of their works. Amongſt many ſucceſſive names, that live in bulky folios, the moſt prominent is that of Horſt, a medical family, which threatened to monopolize the honours of the profeſſion. One of them, named Gregory, was reputed the German Eſculapius. Another ſubjoined to his ample productions a manual of devotion for the faculty, with forms of prayer ſuited to caſes of peculiar difficulty. The phyſician Geſner added to immenſe writings on medicine many volumes of natural hiſtory, which fairly entitled him to be called the Pliny of Germany. In ſimilar books are preſerved the memories of many others, whoſe indiſcriminate

indiſcriminate diligence loſes the praiſe, which a more ſparing and judicious ſelection would have enſured.

In the midſt of ſuch names, that of Fœſius, a phyſician of Metz, is preſerved in a ſort of claſſical ſecurity, by his excellent edition and tranſlation of Hippocrates. A good ſtyle, and unuſual conciſeneſs in a German, has likewiſe reſcued Jodocus Lammius from the gulf, that has involved ſo many of his countrymen in oblivion. Daniel Sennertus, the ſon of a ſhoemaker at Breſlaw, claims a ſimilar exception, both on account of his many candid and well-ordered works, and of the political virtues and talents, which raiſed him from the loweſt ſtation, to the prime honours and dignities of his country.

To our former accounts of the ſtate of medicine in England, towards the end of the 16th century, we have little to add, except what relates to the protracted diſputes between the Galeniſts and thoſe of the chymical ſect. Dr. Thomas Mouffet, a phyſician of the firſt eminence, was the

avowed champion of the latter, as may be ſeen in his celebrated apology for chymical practice. But he diſtinguiſhed himſelf to better purpoſe in the purſuits of natural philoſophy, in which he was aſſociated with Dr. Thomas Gilbert, to whom Queen Elizabeth granted a penſion for carrying on his experiments.

From the medical work of Philip Barrow, dedicated to the great Lord Burleigh, we are furniſhed with a tolerable ſpecimen both of the imperfect ſtate of our art, and the ſtyle of writing peculiar to that day. As it was one of the firſt medical compoſitions in the Engliſh language, it's author apologizes for venturing to truſt his ideas to words perpetually liable to change, and become obſolete by neglect. And here may be obſerved the great advantage, which the ancient claſſics derive from a language, fitted and enriched by long uſe to be the perfect image of thought, and deſtined by accident to remain for ever and unchangeably the ſame.

In

In the reign of James the Firſt, our annals are diſgraced by the ſurvival of chymical quackery, abundance of which is to be found in the works of the celebrated Sir Theodore Turquet de Mayerne, who, being driven from Paris by the predominant party of the Galeniſts, found wealth and honours in the court of England. More reſpect is due to the name of Gulſton, the founder of an annual lecture on pathology, which ſtill continues to be read at the theatre of the Royal College in London.

But this æra, however unimportant in medical annals, muſt be reckoned of the firſt importance in thoſe of general ſcience, and particularly honourable to our country, where that new father of philoſophy, Lord Bacon, firſt taught mankind the direct and certain road to the temple of knowledge. To this great genius the healing art has eſpecial obligations for many uſeful leſſons, that point out the only ſure means of improving it, by a practice founded on the obſervation of nature, and the infallible deductions of certain and approved experience.

CHAP.

CHAP. VI.

OF THE DISCOVERY OF THE CIRCULATION OF THE BLOOD, BY THE ILLUSTRIOUS HARVEY.

THE obvious proofs of the blood's circular motion have made it matter of ſurprize, that a truth ſo apparently ſelf-evident ſhould have remained ſo long unknown. But if the many examples of ſimilar overſight in human wiſdom ſcrutinizing into the myſteries of nature be recollected, no queſtion will be made relative to the merit of that diſcriminating and patient genius, which firſt fully conceived, and finally demonſtrated the perfection of this moſt important of all proceſſes in animal life.

William Harvey's firſt idea of the circulation has been traced to the year 1616, though he did not venture to ſpeak publicly on the ſubject, till, by a long and careful examination, he had convinced himſelf, that

that the blood actually paſſed over the whole body, in an uninterrupted and circular courſe. He divulged his diſcovery in 1620, at the lecture founded by Lord Lumley, in the College of Phyſicians; but waited patiently for public and private objections to his opinion, till 1628, when he publiſhed it from the preſs at Franckfort, at that time the principal literary market of Europe.

The excellence of Harvey's character appears in the principal events of his life. He was born of reſpectable parentage, at Folkſtone in Kent, on the firſt of April 1578, and died on the 3d of June 1658, having lived to ſee the univerſal acknowledgment of his diſcovery, and to receive the general reſpect due to a public benefactor of ſcience. The liberality of his ſentiments is evidenced by the unaſſuming modeſty of his pretenſions, and the patient dignity, with which he bore the injuries done to his fortune, and the cruel deſtruction of his laſt profeſſional labours, by thoſe political zealots, who diſgraced themſelves, in revenging on him the errors of his royal maſter.

The

The fidelity, with which he ſo long ſerved the unhappy Charles, as his confidential phyſician, is indeed an amiable feature of gratitude, for the encouragement that monarch afforded to thoſe anatomical inveſtigations, which, beſides his prime object of the circulation, engaged his ingenuity in reforming the old and inconſiſtent theories of conception, and finally ſucceeded in eſtabliſhing that of oviparous generation.

But not content with dedicating the labours of life to the improvement of his profeſſion, Harvey was anxious to provide for it's permanent honour, when he could no longer ſhare it himſelf. With the emoluments of his practice, he built and furniſhed a public library and muſeum in the College of London, and with a ſingular regard to poſterity, bequeathed his patrimonial eſtate, as a fund for a feſtival to commemorate every eminent improver and profeſſor of the ſcience which he loved.

The diſcovery of the circulation, having ſurmounted all remains of prejudice, and illuminated the greateſt obſcurities of phyſiology,

ſiology, was ſoon regarded with a ſort of public enthuſiaſm, as the *ne plus ultra* of human invention. The extravagant expectations which it afforded, of a ſhort and certain method of renewing the ever-rolling tide of life with freſh and youthful ſupplies, led at firſt to the vain hope of protracting human exiſtence beyond all former bounds. But the futility and ill effects of transfuſion, ſoon proved the preſumptuouſneſs of attempting to diſpenſe with thoſe invariable laws, by which this exiſtence is maintained and continued to the period of it's original deſtination. The failure of theſe attempts is amply compenſated by the clearer views it has given of health and ſickneſs, and the rational modes which it indicates, of treating the moſt frequent and dangerous diſeaſes of ſuffering humanity.

The time of this important diſcovery was remarkable for the increaſe and diffuſion of philoſophical knowledge, which included many new and curious ſpeculations on animal economy. Thus experiments relating to the general laws of motion, and mechanical forces, were applied to the powers

powers of the human body, which the patient vigour of genius was exhauſted in comparing to an hydraulic machine. But here again it was ſoon found, that any imagined proportion between the action of pulſating veſſels, and the reſiſtance of the fluids which they propel, neither accorded with ſuch calculations, nor pointed out any practicable methods of reſtoring the loſt balance of the conſtitution.

CHAP.

CHAP. VII.

OF THE IMPROVED THEORY OF BILIARY SECRETION, AND THE IMPORTANT DISCOVERIES RELATING TO THE SYSTEM OF ABSORBING VESSELS.

THE theory of circulation, by transferring to the heart and it's veſſels the office of making blood, left that great viſcus the liver an object of new ſpeculation. It's former importance, as the ſole organ of ſanguification, had made it's real uſe in ſeparating the bile appear of very little and ſecondary conſequence. But the great and indiſpenſable uſes of this fluid could be no longer over-looked, when it became known, how large a portion of the body nature had allotted for it's preparation.

Dr. Francis Gliſſon, an author of prime ingenuity, both in metaphyſical and natural ſcience, demonſtrated the complete and rational phyſiology of bilious ſecretion, at

no great diſtance of time after Harvey's diſcovery. In the anatomical examinations which brought him to this concluſion, he likewiſe firſt obſerved that irritability of ſimple fibre in the human body, which many ſucceſſive theoriſts have extended to the extreme ſcale of human inquiry, by making it the *primum mobile*, or firſt faculty of animal life.

Beſides other medical writings, Gliſſon gave the firſt regular account of the rickets, a diſorder ſaid to have been endemic in England at that period.

The ancient doctrines of digeſtion, which ſuppoſed the aliment to be conveyed through ſome ſecret channels, and converted into blood in the liver, came ſoon afterwards into queſtion. In inveſtigating this ſubject it fell to the lot of Thomas Bartholin, phyſician to the King of Denmark, who ennobled the family of this zealous anatomiſt, to diſcover by his injections the lacteal veſſels, ſo admirably calculated for carrying on this proceſs, and conveying the nutritive chyle in a direct courſe to the blood. To him likewiſe

likewiſe appertains the honour of having firſt explored another and more extenſive circulation of that thinner fluid the lymph, ſeparated and depoſited by the blood, in every cavity of the body, to preſerve the moving parts from the deſtructive effects of friction.

The completion of theſe diſcoveries was reſerved for John Pecquet, a Frenchman, who not long afterwards obſerved the union of the lacteal and lymphatic veſſels, in one common trunk, the thoracic duct, which diſtills with uninterrupted regularity the ſupplies provided by nature for the waſting tide of life.

Thus have we ſeen, in the courſe of half a century, the moſt important functions of animated being, myſterious and unknown to the wiſdom of antiquity, elucidated and rendered plain to the moſt common capacities.

When ſuch inquiries were in faſhion, it cannot be ſuppoſed, that the brain and nerves would eſcape the general ſcrutiny of the

times. But the ſubtile mechaniſm and operations of theſe refined parts of organization, which have hitherto eluded the cloſeſt inſpections of human ingenuity, are probably intended as the ultimate bounds of it's exerciſe.

The attention beſtowed on them did not, however, prove wholly unproductive, as in theſe examinations the courſe and expanſion of the olfactory nerves were firſt purſued through the membranous lining of the noſtrils, by Conrad Schneider a German, and the various bony cavities of the face, intended by infinite wiſdom to improve the modulation of the human voice, were traced through all their tortuous mazes by our countryman Highmore.

CHAP.

CHAP. VIII.

SOME ACCOUNT OF SYLVIAN MEDICINE, FOUNDED ON THE THEORY OF MATERIAL AND MANIFEST CAUSES.

IN the courſe of our narrative, it has been frequently neceſſary, to obſerve the influence, which faſhionable philoſophy has had on the healing art. We have once more to ſee it following the changes, that took place on the deſtruction of Ariſtotle's authority, which had continued paramount in every ſchool of ſcience, for two thouſand years.

At the beginning of the 16th century, Copernicus firſt ventured to call in queſtion the infallibility of this oracle, by propoſing his new theory of the mundane ſyſtem, which had to ſtruggle with every kind of bigotry and prejudice, for more than a hundred years, before it obtained the aſſent, which it's merit deſerves. It's eſtabliſhment, how-

ever, did not wholly annihilate the atomic theory, which was in part revived by Gaſſendi, and expanded by Deſcartes into the moſt ſublime and aerial ſpeculations.

The vortical ſucceſſions of the Carteſian philoſophy, ſo aptly illuſtrated in the fermentation of vegetable juices, were ſoon applied to confirm thoſe chymical ſyſtems, which had already introduced a ſort of conſtant oppoſition between remedies and diſeaſes. The acidity, adopted by the firſt chymiſts as a principal ſource of morbid affection, was now extended and ſupported by every poſſible analogy, drawn from the varieties and changes obſerved in the fermentative proceſs, and lentor and alcaleſcency of bodily humours were admitted as cauſes, with the ſame want of demonſtration, that had too long allowed the uſe of vague and indefinite deſcriptions.

Correctors of theſe imaginary vices were of courſe exalted into univerſal remedies, and ſupplied every intention of cure, except that very extenſive one, which was inſti-

and

tuted to expel, through the innumerable outlets of the ſkin, ſuch obſtinate juices as reſiſted all medicinal correction, or the fæculencies that remained after a complete depuration of the body. With this laſt view was eſtabliſhed a ſtimulating and ſudorific practice, that conſiſted in doing violence to nature, and could not fail, when carried to extremes, of increaſing the miſchiefs it meant to remove.

This ſyſtem, which was properly called that of material and manifeſt cauſes, was promulgated with great applauſe, from the Univerſity of Leyden, by Francis de le Boe, more commonly known by his Latin name of Sylvius, who continued for many years the medical oracle and teacher of Europe.

But Sylvian medicine exhibits the laſt bright glimmering of the chymical ſect, which had many powerful antagoniſts in various parts of Europe, as appears at large in the entertaining letters of that lively and learned Frenchman Guy Patin, whoſe an-

tipathy to chymical phyſicians is whimſically diſplayed in perpetual invectives againſt their favourite medicine, antimony; the indiſcriminate uſe of which had excited in many honeſt practitioners a degree of horror, not eaſy to be conceived by thoſe, who are acquainted only with it's more innocent and ſalutary effects.

In cenſuring the errors of the Sylvian, or indeed of any medical ſyſtem, it becomes neceſſary, to caution inexperience againſt the haſty concluſions, that ſo readily apply to the characters and conduct of their ſupporters, and diminiſh the credit, which their general candour and practical moderation really deſerve. Young practitioners ſhould likewiſe be reminded, that, in ſpite of miſtaken art, nature is often able to expel morbid matter in the ſafeſt and moſt effectual manner, and even to accommodate her purpoſes, to the plans of her erroneous guide.

But leaving the bigotted votaries, and no leſs bigotted adverſaries of medical ſyſtems, we

we proceed to enumerate thoſe prudent and cautious phyſicians of the age, whoſe diſcoveries or uſeful obſervations have contributed to the real improvement of medicine.

CHAP. IX.

A PROMISCUOUS ACCOUNT OF MEDICAL CHARACTERS CONTINUED TO THE TIME OF SYDENHAM.

AMONGST the countrymen and contemporaries of Sylvius, ſingular honour is due to the name of Nicholas Tulp, of Amſterdam, who, in addition to great profeſſional induſtry, diſtinguiſhed himſelf in a political capacity, and, by his prudent courage as a magiſtrate, ſaved that capital from deſtruction. To Piſo, who attended Prince Maurice to Brazil, and wrote a good natural hiſtory of that country and it's productions, our materia medica is indebted for that valuable drug ipecacuanha. Regner de Graaff, a practitioner at Delft, by applying the microſcope to anatomical ſubjects, led the way to the moſt minute inveſtigations into the ſtructure and phyſiology of the human body.

But

But of all the Hollanders of his time, John Anthony Vander Linden, of a family demanding reſpectful mention in the annals of medicine, has a principal claim to diſtinction, both for his valuable tranſlation of Hippocrates, and his very accurate biographical catalogue of all the medical writers upon record.

In turning to Germany, we behold the induſtry of it's ſcholaſtic phyſicians unabated during the 17th century. Bohn, a profeſſor at Leipſic, greatly improved the anatomical, and Scultetus much enlarged the ſurgical part of our ſcience, whilſt Glauber and the elder Hoffmann were refining the chymical branch. Practical medicine was augmented and methodized by Etmuller, whoſe name is familiar by the abridgement of his great work tranſlated into our language. Mercklin, a phyſician of Nuremberg, republiſhed and enlarged the medical hiſtories of Vander Linden.

In the northern kingdoms of Europe, medical ſtudies were brought into great

faſhion

faſhion by Olaus Borrichius, a teacher at Copenhagen, who employed an ample fortune, gained by his profeſſion, in founding a medical college, with pecuniary endowments for the ſupport of poor ſcholars.

The ſame emulation, which originally made Italy the leader of Europe, continued to pervade that country. Marcellus Malpighi, phyſician to Pope Innocent the XIIth, is celebrated as one of the moſt accurate anatomiſts on record. He was likewiſe the firſt who unfolded, by microſcopic obſervations, the hidden ſtructure of the vegetable world. His rivals in natural hiſtory were Redi and Bellini, phyſicians at Florence, who maintained the higheſt rank amongſt their learned contemporaries. Sebaſtian Badus, a Genoeſe, firſt made known the ſpecific power of bark in agues, which was accidentally diſcovered by it's good effects on the Counteſs of Cinchon, the Spaniſh viceroy's lady.

Of the medical characters of this age, in our own country, the moſt ſingular was Sir

Sir Thomas Brown of Norwich, the eccentric author of the Religio Medici, a performance much talked of at that day, notwithſtanding it's general irrelevancy to medical ſubjects, reſembling more the looſe confeſſion of a ſceptical philoſopher, than the religious creed of a phyſician. But his great work on the detection of vulgar errors was of a more uſeful and ſubſtantial kind.

From the oblivious gulf, which contains many eminent contemporaries of Brown, the claims of philanthropy reſcue the name of Hodges, whoſe patriotic and ſolitary courage emboldened him to remain the only phyſician in London, during the whole courſe of the great plague, of which he lived to give the beſt and only authentic account that is extant.

The claſſical accompliſhments of Willis, diſplayed in his accurate eſſay on fermentation, a ſubject intimately connected with the faſhionable theory of his times, will ever ſecure his reputation from the fate of more

more vulgar and incoherent ſpeculatiſts. A ſimilar exemption will be extended to his friend and diſciple Lower, for his ſyſtematic treatiſe on the human heart, notwithſtanding the ſuſpicions, that would attach on his long and obſtinate perſeverance in the practice of transfuſion.

But of all adherents to the cardiac and alexipharmic doctrines of the Sylvian ſchool the moſt ſober and diſcreet was Thomas Morton, whoſe excellent practical works on fever, prove him to have been an attentive obſerver of nature, conſcientiouſly occupied in withholding or ſupplying ſuch incitements and aſſiſtances, as her indications ſeemed to demand.

At the period in queſtion, much extrinſic advantage accrued to medicine, from the labours of thoſe philoſophic characters, who united themſelves for the reformation and improvement of general knowledge. But of all the founders of the Royal Society it owes peculiar acknowledgments to the truly honourable Boyle, who, in his long and

and unwearied ſearch after truth, omitted no occaſion of obſerving and making known every thing, that might contribute to the relief of his fellow creatures, ſuffering from pain and diſeaſe.

CHAP. X.

OF SYDENHAM.

WHILST the medical attention of Europe was engaged in fallacious compariſons between operations under the influence and control of a living principle in animated bodies, and the external proceſſes of nature, unconnected with, and wholly independant of ſuch a power; our illuſtrious countryman Sydenham ventured to direct his view to the ſigns, by which her intentions in the cure of diſeaſes were more unequivocally expreſſed.

And here we may boaſt, that the greateſt luminaries of our ſcience, in the laſt age, were two Engliſhmen, whom it would be no preſumption to compare with Hippocrates and Galen, the moſt illuſtrious of it's founders. Indeed the ſingle great diſcovery of Harvey tranſcends in importance all

all the anatomical improvements, which entitle the ſecond father of phyſic to peculiar reſpect, whilſt the compariſon of Sydenham to Hippocrates forms a ſimple parallel between the two moſt eminent phyſicians of nature.

That this aſſertion is not hyperbolical, will appear by recollecting, that the ancient dedicated himſelf to obſerve and deſcribe the origin, progreſs, and termination of diſorders, with a careful attention to every circumſtance capable of elucidating their peculiarities and events, to which wiſe conduct the practical habits of the modern form an exact counterpart. But he adds conſiderable animation to the picture, by bringing into view the ſucceſs of his endeavours to aſſiſt and imitate the efforts of nature, whilſt we have to lament our little acquaintance with the fortune of Hippocrates's practice.

At the commencement of his medical career, Sydenham was doubtleſs engaged in ſeeking for the ſource and quality of diſeaſes, in correſpondence with the medical ſyſtems

of his day. But his works, which exhibit ſo many patient hiſtories of their uninterrupted progreſs, ſufficiently prove his early diverſion from art to nature, and tend no leſs to demonſtrate his ſuſpicions of the miſtaken practice of his contemporaries, than his ſubmiſſion to the natural dictates, which preſcribe a removal of obvious hindrances, prior to the excitation of great actions. In a courſe of ſuch unbiaſſed obſervation, all theoretical opinions, far from taking the lead, were either judiciouſly arranged in their proper and ſecondary place, or wholly kept out of ſight, not only as irrelevant to the ſubject, but tending to confound the clear marks of diagnoſis, and the ſymptoms on which a probable prognoſtic could be formed.

On this firm foundation was grounded Sydenham's diſcrimination of fevers and epidemic or atmoſpherical diſeaſes, which has given a ſtamp of excellence to his works, never exceeded by any author of ancient or modern times. Nor is leſs praiſe due to the therapeutic regimen of his inſtitution, which, in obeying the dictates of nature, af-

fords

fords every neceſſary aſſiſtance, without urging her to uſeleſs or hazardous exertions.

The good effects of this ſyſtem were preſently ſeen in the improved treatment of acute diſorders of every claſs, where, inſtead of the faſhionable remedies, expreſsly calculated to forward imaginary depurations, by additional heat and increaſed ſtimulus, a ſafer antiphlogiſtic or cooling plan was adopted, tending to unload the oppreſſed habit, and preſerve the ſtrength of the body for real emergencies. In fevers of a definite or ſpecific kind, ſuch as the ſmall pox, it's advantages were particularly obvious, as it added to the power of encouraging the very neceſſary means of reſtraining the efforts of the conſtitution, which are frequently too violent for the ſafe and effectual expulſion of infectious matter, by a ſeaſonable and perfect criſis.

To the ſimplicity of Sydenham's practice the materia medica owes it's riddance of many an uſeleſs and nauſeous ſpecific. We are likewiſe indebted to it for a full and

final confirmation of the virtues of cinchona, in curing intermittent diſorders, and of the utility and ſafety of opium, in allaying many of thoſe morbid ſenſations in the body, which not only obſtruct the removal of ſubſtantial evils, but are themſelves transformed into diſeaſes of the greateſt extent and importance.

Sydenham's knowledge of the gout, his own conſtitutional malady, muſt not be overlooked, as it furniſhed him with many new ideas on it's cauſes and treatment; which collected together, and exhibited in a new and uniform dreſs, have been received with great attention and applauſe in our own times.

Of the works of this excellent author an opinion ſhould be formed, both with reſpect to the imperfect ſtate of general knowledge in his day, and by a compariſon with contemporary writers, amongſt whom true philoſophical preciſion was little known. Such a judgment will leave no difficulty in accounting for the language, in which Sydenham had been accuſtomed to ſpeak of ebullitions and

and fermentations as the ſources of diſeaſe. Similar conſiderations will likewiſe excuſe his frequent uſe of many familiar and indefinite terms, which, without ſuch allowance, would appear inconſiſtent and unbecoming in an author of ſuch uncommon merit. Nor muſt it be forgotten, that even the ſyſtem of Sydenham, approved by reaſon, and confirmed by ſubſequent experience, has in it the imperfections inſeparable from medicine, and muſt occaſionally yield to the exceptions, which ſound judgment, and unbiaſſed obſervation will perpetually diſcover in the beſt general arrangements, and the moſt univerſal and extenſive rules of medical practice.

Thomas Sydenham was born in the year 1634, at Windford Eagle, in Dorſetſhire, of wealthy parents, and died in London, on the 29th of December 1689. In alluding to the few circumſtances of his ſituation that are known with certainty, we may lament the want of thoſe, which might enable "curioſity to watch the firſt attempts of a "vigorous mind to break the ſhackles of "credulity, ſhake off the yoke of pre-

" ſcription and diſpel the phantoms of hy-
" potheſis."

The novelty of his opinions, and the oppoſition of his ſyſtem to that of his contemporaries, ſeem to have excited in ſome of them, a deſire to repreſent his profeſſional character in very falſe and degrading colours. It was ſaid, that he engaged in practice without any preparatory ſtudy, or previous knowledge of medical ſcience. But our great Engliſh biographer, who wrote the compendium of Sydenham's life, prefixed to the Engliſh tranſlation of his works, has fully proved, that he was early, long, and ſeriouſly employed in the only regular and proper inquiries to qualify him for the important office of a phyſician, and by this proof, has deprived indolence of a great and pretended example, to excuſe the labour of accurate reading and diligent ſtudy, neceſſary in experiments that muſt be made at the hazard of human life.

CHAP.

CHAP. XI.

A GENERAL VIEW OF MEDICAL PROGRESS, FROM THE TIME OF SYDENHAM TO THE EIGHTEENTH CENTURY.

NOTWITHSTANDING the concordance of Sydenham's doctrines with thoſe of ancient medicine, cuſtom and prejudice had their full effects in exciting many clamorous opponents, who repreſented them as leading to dangerous innovations on eſtabliſhed practice.

Many domeſtic cavillers added to ill-founded objections, much perſonal and illiberal invective againſt their author. The diſgrace ſuch conduct brought on Engliſh medicine was aggravated at the ſame period, by the abſurd and thoughtleſs credulity of ſome eminent phyſicians, who became the avowed dupes of Valentine Greatrakes, that crafty and audacious MAGNETISER of our grandfathers.

To draw a haſty veil over this peculiar ſhame of our country, we proceed to mention the noiſy oppoſition of a new ſect in Germany, headed by Cornelius Decker, of Berlin, nicknamed Bontekoë, who attempted to perpetuate a ſyſtematic jargon of medical ſcience, by an incorporation of every chymical myſtery with all the chimæras of Carteſian philoſophy.

We have likewiſe to notice the ill reception which the antiphlogiſtic practice met with in Italy, where the learned Lanciſius, phyſician to Pope Clement the Eleventh, ſteadily maintained the falling credit of the Sylvian ſchool. But a more ſturdy oppoſition was excited by his countryman Portius, a writer of eminence, who made an expreſs attack on that moſt important of antiphlogiſtic remedies, blood-letting, which he reviled as an uſeleſs and barbarous operation, unknown to ancient medicine, before the ſavage and bloody ſports of the Romans paved the way for it's introduction. Ramazzini, a profeſſor of Padua, made a ſimilar attempt to leſſen the credit of Sydenham's

denham's ſyſtem, by compoſing a voluminous eſſay on the pernicious effects of the Peruvian bark, the free and proper uſe of which our illuſtrious reformer had been the principal means of making univerſally known.

In the enumeration of more important characters, who had a better influence on the ſtate of European medicine, this bigotry of Italian phyſicians ſoon appears to be compenſated by the candour and uncommon merit of Baglivi, whoſe rapid progreſs in rational practice, during the courſe of a very ſhort life, entitles him to the firſt rank of diligent and uſeful obſervers.

Similar credit is due to thoſe French practitioners, who claim our final attention, amongſt whom Peter Dionis ranks with the moſt laborious and correct of anatomiſts; Lemery and Seignette, with the leaders in rational chymiſtry; whilſt the honeſt Francis Mauriceau, has the excluſive honour of giving a new and ſcientific form to the obſtetric branch of our art.

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But no Frenchman merits more honourable mention in the memoirs of medicine, than it's minute and accurate hiſtorian Daniel Le Clerc, whoſe extenſive information, fidelity, and love of order, peculiarly qualified him for his arduous undertaking. Nor does it require the ſmalleſt exaggeration, to compare the judgment and diligence, which led ſuch a man to the moſt obſcure and remote ſources, in ſearch of every circumſtance relating to his ſubject, with all the ſucceſsful and ardent induſtry, that ever diſtinguiſhed any hiſtorian of human ſcience.

The meritorious labour, ſo often recorded in preceding notices of German phyſicians, was ſignalized in their medical progreſs to the laſt period of our inquiry. Anatomy, which continued to be eagerly cultivated in every ſchool of Germany, received many new lights from the diſſections of morbid parts by Bonetus, phyſician to the Elector of Brandenburg, afterwards King of Pruſſia, who ennobled the family of this anatomiſt, and raiſed his ſons to the firſt dignities and offices of their country. Another phyſician to this monarch was John James Mangetus,

Mangetus, the diligent author of many extenſive and uſeful medical collections, whoſe zeal for the honour of his profeſſion enriched it's annals with a greater variety of biographical information, than the records of any other ſcience can boaſt.

In addition to many other general obligations of our art, the chymical branch is indebted for a new conſtitution to the illuſtrious Stahl, who purified both it's language and practice from myſtery and uncertainty, and inſtituted a philoſophical mode of analyſis, which entitles him to be called the father of ſcientific chymiſtry.

But the fame of all German phyſicians is eclipſed by that of Frederic Hoffmann, whoſe various and extenſive accompliſhments in all the learning of a great phyſician, joined to his philanthropic zeal in communicating his knowledge to the world, will ever enſure him a principal rank amongſt the benefactors of the healing art. In addition, however, to his general and well-earned praiſe, Hoffmann merits the peculiar diſtinctions of an enlightened theoriſt, who greatly

greatly improved medical reaſoning, by the introduction and uſe of a regular and philoſophical preciſion, very neceſſary to confine the aberrations and inconcluſive reſults of ordinary ſpeculation. His pathological ſyſtem of ſpaſm, beſides it's evidences of careful obſervation, affords likewiſe a rational ground of doctrines, which, though imperfect in parts, ſeem calculated both to elucidate many arcana of diſeaſe, and ſuggeſt the moſt natural and efficacious modes of cure.

Much light was thrown on medical phyſiology in Holland, by the ſucceſsful purſuits of it's anatomiſts, at the concluſion of the laſt century. Anthony Nuck, a profeſſor of Leyden, compleated the diſcoveries that illuſtrate glandular ſecretion. The anatomy of the human body was portrayed with accuracy and elegance unknown before, in the ſplendid anatomical plates and publications of Bidloo; whilſt the mechanical ſkill of William Muys inveſtigated, with more than ordinary ſucceſs, the ſtructure of muſcles, and the phenomena of muſcular motion, the phyſical cauſe of which muſt probably

probably remain for ever amongſt myſteries inacceſſible to human wiſdom.

New diſtinctions are due to Frederic Ruyſch, of Amſterdam, whoſe ingenuity invented methods of preſerving dead bodies from decay, and by a variety of anatomical preparations added many curious and permanent ſtores of information, unknown to former times. To him, likewiſe, pertains the honour of diſcovering thoſe valves, which are of ſuch important uſe, and explain ſo many phenomena in the lymphatic circulation of the lower extremities.

But the great name of Boerhaave, though laſt in point of time, muſt ever ſtand at the head of Dutch phyſicians, and will doubtleſs maintain a pre-eminent rank in medical hiſtory, as long as ſagacity, diligence, and candour claim the reverence of mankind. By him, the field of medical inquiry was not only finally cleared from the accumulated rubbiſh of paſt ages, but from all the extraneous matter, which had ſo long encumbered what it was unable to fertiliſe. Nor can detraction find room to queſtion

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the brilliancy and purity of ſuch a character, on account of any fallible theories, founded on the long received, though miſtaken qualities of animated matter.

Every alluſion, however, to the pathological ſyſtem of Boerhaave is here out of place, except with a view of pointing out the ſource of many indefinite notions, relative to obſtructions in the human body, occaſioned by the lentor or viſcidity of it's juices and circulating fluids, which are ſtill prevalent amongſt the modern practitioners of medicine in Europe.

Returning for the laſt time to our native ſoil, and approaching the termination of our inquiry, we have to acknowledge the merit of Wiſeman, the firſt of Engliſh ſurgeons, who greatly improved, and by his judicious publications extenſively diffuſed the knowledge of his art. Nor muſt that of Cowper be overlooked, to whoſe reſearches Engliſh anatomy is much indebted, particularly for the diſcovery of thoſe glands in the urethra, which had eſcaped the ſcrutiny of former anatomiſts.

Of

Of others, who contributed to the advancement of our art, Walter Harris is known as the firſt Engliſh writer on children's diſeaſes; whilſt Bate, Fuller, and Salmon are remembered for their additions to our pharmaceutic ſtore, and Grew and Liſter for their attention to natural hiſtory and botany. But this laſt branch of ſcience was carried to unuſual perfection by their contemporary, the philoſophic Ray, whoſe ſynopſis of plants furniſhed an example of preciſion, unrivalled in his own times, and only ſuperſeded in ours by the arrangements of ſubſequent diſcovery.

It affords a ſingular gratification of patriotic feelings, to cloſe the catalogue of Engliſh phyſicians with the three great names of Radcliffe, Freind, and Mead, which would honour the records of learning in the brighteſt days of it's proſperity.

To Radcliffe's liberal ſpirit and love of ſcience the moſt ſplendid ornament of Oxford bears ample teſtimony; whilſt his generous zeal, to enrich medicine with all the advantages of foreign culture, exhibits him

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as the moſt munificent of it's patrons. But it is to be lamented, that the profeſſional ſagacity, and deciſive character of ſuch a man, ſhould live only in tradition. Perhaps, however, the moſt voluminous of medical inſtructions never contained a more uſeful and impreſſive leſſon, or more emphatically expreſſed the faithful reſult of enlightened experience, than Radcliffe's declaration; that, when a young practitioner, he poſſeſſed twenty remedies for every diſeaſe, and before the end of his career, he found twenty diſeaſes, for which he had not one remedy.

The claſſical accompliſhments, logical accuracy, and medical penetration of Freind, have been ſuch frequent ſubjects of eulogium, that we have only to confeſs the obligation of our art for his elaborate hiſtory of it's progreſs, through thoſe obſcure periods of time, where information could only be acquired by a condeſcending diligence, rarely combined with great literary acquiſitions, or the ordinary refinements of taſte.

It would be equally ſuperfluous, and a tranſgreſſion of our propoſed limits, to re-

peat the public acknowledgments, which have been ſo often made in our own days, to the worth and dignity of Mead, whoſe literary embelliſhments, and liberal conduct to ſcholars, gave unuſual credit to profeſſional ardour, and reflected a luſtre on medicine, ſeldom tranſcended in the greateſt external ſplendour of this ſcience.

By a ſtill longer anachroniſm, the feelings of individual reſpect dwell on the recollection of ſuperior excellence, loſt in a Warren, whoſe medical ſkill, improved and enriched by every various and cultivated talent that has claims on public confidence, was adorned and poliſhed by as much candour and urbanity of manners, as ever gave conſolation to ſickneſs, or conciliated private eſteem. But the fading breath of contemporary praiſe can only tranſmit an imperfect and fleeting memorial of that conſummate art, which leaves no fixed effect behind. Of ſuch men, the merits are too generally forgotten with their ſervices, whilſt the ſelfiſh world is at once ready to appreciate their lives of unremitting duty, conformably with it's own maxims,

——————When veil'd in Death
Their Virtues vaniſh, and their Fame decays.

CHAP. XII.

CONCLUSION OF THE SUBJECT, WITH REFERENCE TO THE PRESENT STATE OF MEDICINE IN ENGLAND.

THE preceding review of medicine furniſhes many reflections on it's limited and unſtable nature, in common with other branches of finite knowledge; whilſt it's peculiar imperfection appears, in the ultimate reference of it's general principles to thoſe remote and myſterious powers of animal life, which are placed beyond the circumſcribed bounds of human wiſdom. The degree of conjecture, unavoidably introduced into it by ſuch a connexion, muſt ever render it's concluſions fallible and uncertain, when compared with thoſe of more demonſtrable ſcience.

But this partial defect, is greatly compenſated by the abundance of authentic facts, preſerved in the records of experience,

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as proper and rational grounds of uſeful practice. The bare remembrance, however, or haſty application of theſe facts, without judgment or compariſon, having ever been inadequate to the wiſe ends of their preſervation, every careful and conſcientious obſerver will ſee the neceſſity of conſidering and arranging them, for the purpoſes of recollection and uſe. This arrangement ſhould indeed be confined to thoſe probabilities of hypotheſis, which acknowledge both the reſtraints of human prudence, and the definitive ſanctions of time and general conſent.

Under ſuch control, equally ſuperior to the habits and prejudices of ſolitary diſquiſition and private experience, medical theory may be able both to remedy the diſorderly negligence of empiriciſm, and to obviate that pliancy of analyſis, which, in obedience to individual fancy, can reſolve living bodies and living principles into fictions of imagination, little reſembling the legitimate reſults of philoſophic inquiries.

But the moſt rational and moſt uſeful of medical theories, partaking the imperfect nature of the materials with which they are conſtructed, will ever be liable to perverſion, when, by ſuperſeding attention to nature's dictates, they give conceit to inexperience, and fill young practitioners with the conſcious firmneſs of veteran adepts.

And here it may be ſafely aſſerted, that many aphoriſtical doctrines in preſent vogue, which treat every part of a complicated art by very general and conciſe forms of claſſification, well ſuited to the reliſh and confidence of youth, have a direct tendency, both to encourage the preſumption of idleneſs and ignorance, and to diſcredit and obſcure that moſt uſeful knowledge of diſeaſes, which is acquired by minute attention to their peculiar characters, and to the idioſyncraſy and varying condition of patients, which the bold Tyro of modern practice rarely condeſcends to obſerve.

With the eſſential imperfections of medicine depending on it's natural uncertainty, many extrinſic, local, and temporary circumſtances,

cumſtances, connected either immediately or remotely with public manners, have ever conſpired to perpetuate proofs of it's frequent inſufficiency to the full purpoſes of it's intention.

A ſuperficial view of it's preſent ſtate in England diſcovers, amongſt the moſt prominent of theſe circumſtances, the defects of medical education and medical character, in many of thoſe engaged in the profeſſion, who having been early deſtined to a very important office, without any regard to previous qualifications, labour under the conſtant neceſſity of procuring their daily ſupport, by means calculated neither to promote their own progreſſive improvement, nor the comfort and advantage of their patients.

But beſides a very common and abſurd mode of compenſating medical attendance, the general inadequate remuneration of medical ſkill, with few exceptions in regard to eminent and ſuperior practitioners, is another cauſe of it's rarity; the more ſurpriſing in a country, where induſtry in other employments

employments is rewarded without grudging, and men are daily enriched to exceſs, by occupations that require very little mental exertion, and are wholly exempted from the painful ſameneſs of a life, paſſed in liſtening to tales of miſery in the polluted atmoſphere of ſick chambers.

In purſuing this ſubject, the compariſons appear defenſible, which contraſt, not only the few inſtances of opulence, but of humble independance acquired by medical practice, with the riches that ennoble the profeſſors of other liberal ſciences, and furniſh a young and unworn mercantile crowd with ample offerings for the ſhrine, at which all pretenſions to modern greatneſs are confirmed.

Another local and appropriate ſource of defect in this iſland is the venality, which diſpoſes of academical teſtimony on the moſt contemptible terms, and introduces a confuſion into medical diſtinctions, that has long and loudly called for the hand of reſtraint. This abuſe, however, may ſerve to demonſtrate a ſort of excluſive virtue in medicine

medicine, which can preſerve any tolerable credit in circumſtances, that would more materially affect that of other profeſſions. For the law would loſe much of it's due reſpect, even in judges, if it's meaneſt retainer could emblazon his coat with the ermines of the bench; nor would the dignity of archbiſhop, burleſqued by an illiterate curate, fail to diſgrace the authority it was intended to ſupport.

The advantages of univerſal and uncontrolled freedom, ſo friendly to the general intereſts of ſcience, may be urged in alleviation of theſe complaints, for which any poſitive or political remedy would probably incur all the dangers and difficulties of violent or ſudden changes in thoſe eſtabliſhed cuſtoms, which time has conſecrated to public utility. But independent of real and inſurmountable obſtacles, neither the ſupineneſs of apathy, nor the ſuggeſtions of ſelf-intereſt ought to perpetuate an eternal acquieſcence in public inconveniencies, which originate rather in accident, or the more gradual influence of all-changing time, than in any fixed or unavoidable cauſe.

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Amongſt other caſual and external impediments delaying the progreſs of our art, which it would be the common intereſt to remove, muſt be reckoned the irregularity of public ſentiment in matters of health, which has ſeldom been guided by reflexion, or attention to public good. And in this reſpect, it would be impoſſible to queſtion the claims of the preſent age to all the honours of credulity, and the moſt licentious diſdain of reaſon and common ſenſe.

Much of this pre-eminence belongs to thoſe of the higheſt ranks, whoſe example has it's full force on the moſt diſtant undulating circle of ſociety, in every part of which a currency is hourly given, not only to barefaced craft and extravagant profeſſion, but to every chimerical reverie, that ventures to imagine great and ſubſtantial effects produced by powers either not in exiſtence, or wholly inadequate to the pretended purpoſe.

The ſlighteſt degree of compliance with ſuch follies, in medical practitioners, beyond that of ſilent contempt, doubtleſs merits the

the reproof of treaſon to the true intereſts of that ſcience, the purity of which it is their duty to preſerve. But no cenſure is equal to their criminal ſervility, who add to ſuch compliance, not only the general meanneſs of flattery, but the baſer condeſcenſion of founding profeſſional conſequence on ſubſerviency to the vices of their patients.

To cloſe the train of domeſtic obſtructions to the improvement of our art, comes the ſubtle influence of faſhion, inceſſantly and banefully operating on the vigour of ſcience, in the indolent vacuity of luxury and wealth. And what can more powerfully diſcourage honeſt application to any duty of ſocial life, than a dependance on the thoughtleſs caprice, that unfeelingly withdraws confidence and reward, with the ſame want of judgment, with which they are frequently beſtowed?

In taking leave of the ſubject, let imagination be indulged with conceiving the utmoſt perfection of human medicine, by a removal of all external hindrances, and an univerſal prevalence of the moſt enlightened practice,

and there will ſtill remain enough of bodily ſickneſs in the world, greatly to impede and diminiſh the enjoyments both of ſenſe and intellect, through the ſhort and feveriſh dream of human life.

THE END.